AC 4488 (2)

Library

II

PORT OF LIVERPOOL

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

PORT HEALTH AUTHORITY

FOR THE YEAR

1963

MINISTRY OF HEALTH - LIBRARY -

Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

https://archive.org/details/b29994032

PORT OF LIVERPOOL

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

TO THE

PORT HEALTH AUTHORITY

FOR THE YEAR

1963

PORT HEALTH AUTHORITY
OF
LIVERPOOL

REPORT FOR THE YEAR 1963
BY THE
MEDICAL OFFICER OF HEALTH

This is the 91st Annual Report upon the work of the Liverpool Port Health Authority.

The Permanent Constitution of the Liverpool Port Health Authority defines the limits of the port for health purposes, as coincident with the limits laid down by H.M. Customs. By " The Appointment of the Port of Liverpool Order, 1956 ", the port of Liverpool is " An area bounded by a line:

(1) commencing at the termination of the port of Chester, namely at Hilbre Point (which is referred to as the Red Stones in Hoylake on the Point of Wirral in the Treasury Warrant dated 16th December, 1847, appointing the port of Chester): and

(2) continuing up the River Mersey on the Cheshire shore to Ince Ferry the western termination on the Cheshire shore of the port of Manchester, but excluding (where it touches the port of Manchester) so much of the Eastham Channel in the River Mersey as is enclosed by an imaginary line of dolphins on the east side of the Eastham Channel and, at a distance of five hundred and thirty-eight yards from the seaward extremity of the eight feet lock at Eastham, a further imaginary line to the foreshore at right angles to the first line: thence

(3) crossing the River Mersey in a supposed straight line to Dungeon Point being the western termination on the Lancashire shore of the port of Manchester: and

(4) continuing along the coast of the County of Lancaster to the southern boundary of the port of Preston, namely an imaginary line drawn in a true north-west direction from the inner north-west sea mark on the beach at Formby Point shown in the Admiralty chart of Liverpool Bay, dated 9th July, 1954.

The port shall include all islands, rivers, bays, channels, roads, bars, strands, harbours, havens, streams, and creeks (except the Manchester Ship Canal) within the specified limits and shall extend seaward to a distance of three miles from low water mark along the coast within the specified limits."

SECTION I STAFF

TABLE A

Name of Officer	Nature of Appointment	Date of Appointment	Qualifications	Any other Appointments held
Professor Andrew B. Semple	Medical Officer of Health	5.12.52	V.R.D., M.D., Ch.B., D.P.H., Q.H.P.	Medical Officer of Health, City of Liverpool. Professor of Public Health, University of Liverpool. Supervising Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
Dr. J. B. Meredith Davies	Deputy Medical Officer of Health	1.5.53	M.D., B.S., D.P.H.	Deputy Medical Officer of Health, City of Liverpool. Medical Inspector under th Aliens Order and the Commonwealth Immigrants Ac Lecturer in Public Health, University of Liverpool.
Dr. T. L. Hobday ...	Principal Medical Officer	19.6.58	M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H., D.P.A., Barrister-at-Law.	Medical Inspector under th Aliens Order and the Commonwealth Immigrants Ac
Dr. A. J. Graham ...	Assistant Medical Officer	12.6.59	L.R.C.P., L.R.C.S.(Ed.), L.R.F.P.S.(Glas.), D.P.H.	Medical Inspector under th Aliens Order and the Commonwealth Immigrants Ac

of Officer	Nature of Appointment	Date of Appointment	Qualifications	Any other Appointments held
Drawneek	Boarding Medical Officer (part-time)	1.5.62	M.B., B.S., D.P.H.	Principal Medical Officer (Epidemiology) City of Liverpool. Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
Phillips	Boarding Medical Officer (part-time)	1.4.60	M.R.C.S., L.R.C.P.	Assistant Medical Officer, City of Liverpool. Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
O'Brien	Boarding Medical Officer (part-time)	1.10.60	B.A., M.B., B.Ch., B.A.O., L.M.	Assistant Medical Officer, City of Liverpool. Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
mith	Boarding Medical Officer (part-time)	from 1.7.62	M.B., Ch.B., D.P.H.	Assistant Medical Officer, City of Liverpool. Medical Inspector under the Aliens Order and the Commonwealth Immigrants Act.
. McCoy	Chief Port Health Inspector	7.6.46	Certificate of the R.S.I. and Sanitary Inspectors Examination Joint Board. Liverpool University School of Hygiene Sanitary Science Certificate. Liverpool University School of Hygiene Meat and Food Certificate. B.O.T. 1st Mate (Foreign-going) Certificate.	—

Name of Officer	Nature of Appointment	Date of Appointment	Qualifications	Any other Appointments hel
Mr. E. M. Dutton ...	Chief Port Food Inspector	10.1.60	Certificate of the R.S.I. and Sanitary Inspectors Examination Joint Board. R.S.I. Meat and Other Foods Certificate. Liverpool University School of Hygiene Sanitary Science Certificate. Liverpool University School of Hygiene Meat and Food Certificate. Smoke Certificate.	—
Mr. G. M. Gillies ...	Administrative Assistant	6.5.59	L.G.E.B. Promotion Examination.	—

The staff also includes:

A Deputy Chief Port Health Inspector, two Port Health Inspectors, one Assistant Port Health Inspector and ten Rodent Operatives;

A Deputy Chief Port Food Inspector, four Port Food Inspectors and one Assistant Port Food Inspector;

One Clerical Officer and one Shorthand Typist.

I would like to take this opportunity of expressing my thanks to all the staff of the Port Health Section for their conscientious and loyal work throughout the year. All aspects of port health work require constant vigilance, and I am most grateful to all for the way this has been exercised. I would particularly like to mention Dr. T. L. Hobday, who has given such good service over a number of years, and in the past six years as Principal Medical Officer (Port Health). He will be going shortly to take up another appointment as Reader in Public Health at Liverpool University, and in expressing my gratitude to him I would like to wish him every success in his new post.

SECTION II

TABLE B

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR 1963

Ships from	Number	Tonnage	Number Inspected		Number of ships reported as having, or having had during the voyage, infectious disease on board
			By Medical Officers	By Port Health Inspectors	
Foreign Ports...	6,628	15,920,736	403	3,616	82
Coastwise ...	4,366	3,978,776	1	178	1
Total ...	10,994	19,899,512	404	3,794	83

SECTION III

TABLE C

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

PASSENGER TRAFFIC

No. of passengers INWARDS	No. of passengers OUTWARDS
169,100	177,639

(These figures do not include traffic between Liverpool and Northern Ireland.)

CARGO TRAFFIC

Principal Imports	Principal Exports
Flour, grain, etc., sugar, molasses, etc., wood, fruit and vegetables, cotton, ores and scraps, meat, feeding stuffs for animals, tea, butter, cheese, eggs, etc., cocoa, seeds or nuts for expressing oils, copper, coal, oils, fats, resins and gums, hemp, jute, sisal, etc., hides and skins, tobacco, rubber.	Iron and steel manufactures, chemicals and sodas, salt, machinery, pottery, glass and glassware, sugar, molasses, etc., flour, grain, etc., copper, brass, tin, etc., soap and oils, etc., ale, beer, wine, spirits, etc., cement, electrical goods, etc., paper, cardboard, etc., vehicles, aircraft, motor cars, locomotives, etc., bricks, cutlery, hardware, etc., fine goods.

Ships arrive in Liverpool from ports all over the world.

SECTION IV

INLAND BARGE TRAFFIC

The number of barges plying in and about the port of Liverpool is approximately 100, representing an estimated total of 12,000 tons.

CANAL BOATS (Public Health Act, 1936, Part X)

The number of canal boats still on the Liverpool Register has been further reduced during 1963 and now totals only 52.

No. of boats inspected	40
No. of boats with contraventions	Nil
No. of boats inspected for registration	Nil

SECTION V

WATER SUPPLY

There has been no change in the source of water supply for either the seaport or the airport.

During the year a total of 152 samples was taken from 20 ships, one ferry steamer and one salvage vessel, and sent for bacteriological examination. Thirty-nine samples were considered unsatisfactory and appropriate action was taken.

There are no water boats in the River Mersey, but, under special circumstances, tug boats carry and supply fresh water to foreign-going ships. Seventy-two samples of water were taken from 15 tugs and 29 were considered to be unsatisfactory.

Whenever the samples of water proved to be unsatisfactory the owners were advised to chlorinate the tanks, pipelines and pumps, and to refill with clean water, and further samples were taken. Officials of the Ministry of Transport were informed and joint action taken to ensure that pumps and hydrants used for normal deck service should not be used for supplying fresh water.

The owners were advised that tugs delivering water to ships should only utilise their fresh water pumps. It was also suggested that all new tugs capable of supplying fresh water should have fresh water pumps, hydrants and fittings on a separate system. Full co-operation with Ministry of Transport officials has been maintained.

SECTION VI

PUBLIC HEALTH (SHIPS) REGULATIONS, 1952

(1) *List of Infected Areas*

The list of infected ports is as follows: Rangoon, Dar-es-Salaam, Rio de Janeiro, all ports in China, Indo-China, India, Pakistan, Belgian Congo, Liberia, Nigeria (including British Cameroons), Ghana, Colombia and Ecuador. The list is compiled from the Weekly Epidemiological Record of W.H.O. and is notified, in written form, to all officers of H.M. Customs, the river pilotage service, and Mersey Docks and Harbour Board.

(2) Incoming vessels from infected ports are required to notify their time of arrival by radio signals, to be sent not less than four hours before arrival in the river. Normally this signal is sent when the Mersey Pilot boards the vessel off Anglesey. Special arrangements are then made to board the vessel, which may either be met at its berth or cleared by means of a hired tug while still in the river.

Up to May this year all incoming vessels which required medical clearance were boarded from the vessel "William Gregson" which was chartered from the Liverpool Fire Service. At the end of May this vessel was sold and there is now no vessel which has the special task of placing boarding medical officers upon incoming vessels.

Arrangements have been made for a new Morris Oxford Traveller vehicle to be made available to the boarding medical officers, early in 1964, to take them to vessels which require boarding when they reach their berth. This vehicle will also be equipped as an emergency ambulance and will have radio telephony.

(3) *Notifications Other than by Radio*

Many shipping companies notify the arrival of their vessels by letter or telephone. This has not been found to be always reliable and radio messages from incoming vessels are always required.

(4) There has been no change in the designated mooring stations allotted for the examination of shipping, although most vessels are examined while under way.

The number of ships visited by the boarding medical officers during the year was 404 of which 291 were from infected ports.

By arrangement with Manchester Port Health Authority, vessels bound for Manchester from infected ports are examined by the Liverpool Port Health Authority in the river. During 1963, 40 of the vessels boarded were bound for Manchester.

(5) (a) Cases of infectious diseases, other than quarantinable diseases, are accommodated in Fazakerley Isolation Hospital.

(b) There has been no change in the method of surveillance and follow-up of contacts of infectious diseases.

(c) Any disinfection which may be required in ships is done by inspectors of the Port Health Authority. During 1963, 48 disinfections after infectious disease were carried out. Infected beds and bedding were removed for steam disinfection.

PUBLIC HEALTH (AIRCRAFT) REGULATIONS, 1952

Liverpool is served by a major airport at Speke, 9 miles from the City centre. The Port Health Authority is responsible for enforcing the above Regulations in the airport. Passenger aircraft arriving at the airport come from other airports within the United Kingdom, Eire, and the Continent, and few aircraft arrive directly from infected areas. An examination room is maintained in the main airport building, and the medical officers on the Port staff, all of whom hold appointments as Medical Inspectors under the Aliens Order, and the Commonwealth Immigrants Act, are available at the request of the Immigration Authorities to conduct inspections of persons arriving by air. All passengers arriving from an infected area are inspected and the validity of their vaccination certificates ascertained. Forewarning of such aircraft is given by H.M. Customs to the Port Health Authority and later information is supplied directly from Aircraft Control in the airport.

Indian crews for merchant ships are frequently flown from India to join ships in the United Kingdom. In some cases these men arrive by air elsewhere, normally London, and proceed to Liverpool to join their ship: notification of this is always received from the Airport Medical Officer, London. On occasions, chartered aircraft bring the crews directly to Liverpool. Such arrivals are kept under daily surveillance here until either the vessel sails or until the incubation periods for quarantinable diseases have expired.

PUBLIC HEALTH (SHIPS) (AMENDMENT) REGULATIONS, 1963 AND PUBLIC HEALTH (AIRCRAFT) (AMENDMENT) REGULATIONS, 1963

These enactments came into force in August 1963, and they strengthen the measures which may be taken against the risk of imported smallpox when ships or aircraft arrive from any part of Asia, Africa or the Americas (with the exception of Canada and the U.S.A.). The boarding medical officer has authority to require the production of vaccination certificates and if these are not available or expired the travellers (this is interpreted to cover both crew and passengers) may be vaccinated, placed under surveillance, or placed in isolation for a period of 14 days.

Every effort is being made to use these Regulations to ensure a higher standard of vaccination, and warning circulars have been sent to all ship owners and shipping agents operating from the port of Liverpool. A copy of the circular concerned follows.

TELEPHONE NO. CENTRAL 8433
EXT. ....

PROFESSOR ANDREW B. SEMPLE
V.R.D., M.D., D.P.H, Q.H.P.
MEDICAL OFFICER OF HEALTH

PLEASE ADDRESS ALL CORRESPONDENCE
TO THE MEDICAL OFFICER OF HEALTH

PORT HEALTH AUTHORITY,
HEALTH DEPARTMENT,
HATTON GARDEN,
LIVERPOOL,

YOUR REF.........

OUR REF. ....

Dear Sirs,

The Public Health (Ships) (Amendment) Regulations, 1963

1. I am writing to draw your attention to certain features of the above Regulations which may affect ships under your control. The Regulations give Medical Officers of seaports power to require travellers from certain areas to produce a valid certificate of vaccination against smallpox. "Travellers" includes both crew and passengers. The Regulations apply, at the moment, to persons coming directly from Africa, Asia and any part of the American continent with the exception of U.S.A. and Canada. Should smallpox break out in any other part of the world, other areas may be added.

2. If a port medical officer is not satisfied that there is sufficient evidence that any traveller from the above areas is fully protected against smallpox, port health authorities are given additional powers which include the placing of such a person in isolation for some days.

3. In order to avoid delay in the medical clearance of vessels under your control, and to avoid any inconvenience to travellers, I suggest that the following documents are available to the medical officer, or his representative, when the vessel is boarded:

(a) A list bearing the last date of vaccination against smallpox of each member of the crew, the accuracy of this list being certified by the signature of the master.

(b) A separate list showing the same particulars in relation to passengers.

When a vessel arrives in Liverpool within 28 days of leaving an infected port the medical officer will invariably board this vessel and in addition to the above documents he will require a list of crew addresses and passenger addresses. It may, therefore, be convenient to add the smallpox vaccination dates to these lists. This is quite acceptable. In certain cases, of course, the medical officer may require to see the actual smallpox vaccination certificates. Where a vessel from the areas specified in paragraph one is not boarded by a medical officer and is cleared by the Customs, a port health inspector will take the vaccination lists from the vessel some time after docking.

4. It is suggested that your agents abroad should be acquainted with these Regulations in order that there should be no delay when the vessel arrives in Liverpool.

Yours faithfully,

Andrew B. Semple

Medical Officer of Health.

When such documents are inspected and found not to be in order, the attention of the local agents, and the owners, is drawn to the matter in every case, and suitable assurances obtained: the travellers concerned are vaccinated here. As Liverpool Airport does not receive many aircraft from outside Europe, it is rarely necessary to make use of these Regulations when meeting aircraft.

SECTION VII

SMALLPOX

No cases of smallpox were landed in the port of Liverpool during the year, and there was no report of cases having been landed elsewhere from ships later docking in Liverpool.

Smallpox consultants available are:—

Professor Andrew B. Semple, Health Department, Hatton Garden, Liverpool, 3.

Professor A. W. Downie, Department of Bacteriology, The University, Liverpool, 3.

Dr. E. R. Peirce, 8 Grosvenor Road, Liverpool, 19.

Dr. A. B. Christie, Fazakerley Hospital, Longmoor Lane, Liverpool, 9.

Facilities for laboratory diagnosis of smallpox are available in the Liverpool University Bacteriological Department.

SECTION VIII

VENEREAL DISEASE

Venereal infection aboard ships remains at a low level: 15 cases were examined aboard 6 vessels arriving in the port during the year. These were all referred for treatment to the Seamen's Dispensary.

Whenever possible the patient is interviewed by a medical officer or a port health inspector and given advice together with a small card showing the location of treatment centres, with times of treatment.

SECTION IX

CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES IN SHIPS

No cases, or suspected cases, of cholera, plague, relapsing fever, smallpox, typhus or yellow fever occurred in the Port during 1963.

Gastro-Enteritis

The vessel "Devon" arrived on the 1st January from Australia via Aden and Suez. A member of the crew had died at sea from gastro-enteritis on the 13th December, 1962, and was buried in Aden on the 14th December. Four other members of the crew suffered from gastro-enteritis and were landed at Aden and admitted to hospital there. They later recovered and rejoined the vessel. Provisions and water were examined in Aden and found to be satisfactory except for a fillet steak which was contaminated with Clostridium welchii. The meat had been supplied in Melbourne on the 12th November. Of the six cartons of steaks originally supplied four only remained on board. Eight samples of the meat remaining on board were submitted for bacteriological examination, and Clostridium welchii was found to be present in the fillet steak. The entire consignment of meat in the ship's stores, from which samples were taken, was destroyed at the owner's request. Two samples were also taken of Australian milk, still on board, and were found to be satisfactory. The ship's galley and storerooms were inspected and found to be clean and in good condition. There were no other cases of sickness on board.

The m.v. "Kruswica" arrived on the 1st January. On the following day, the radio operator's wife was found to be suffering from suspected food poisoning. The patient, accompanied by her husband and two of the ship's passengers, had spent the evening ashore at a cinema and had eaten ice cream and "hot dogs" consisting of grilled sausage, onions and bread roll, purchased from a street trader. No other food or drink was consumed by any member of the party while ashore. The galley, storerooms and accommodation was found to be clean and in good condition. No other cases were reported.

The m.v. "Eastbank" arrived 9th February from Honiara. It was reported that a seaman had been removed to hospital at Honiara on the 8th December, 1962, suffering from typhoid fever. Five samples of ship's drinking water were submitted for bacteriological examination and two were considered to be unsatisfactory. The ship's tanks, pipelines and taps were heavily chlorinated, pumped out and re-filled with clean water. Further samples were then taken which proved satisfactory.

The m.v. "Siljistad" arrived from Mena al Ahmadi on 1st May. A number of cases of enteritis had occurred during the voyage. The vessel had proceeded through the Suez Canal where it had encountered considerable fly infestation. Six samples of water were taken and submitted for bacteriological examination and all proved to be satisfactory. Nineteen specimens of faeces taken from the crew were also submitted for bacteriological examination, and five of them were found to be positive for Shigella shigae. As the results of the examination were not received until the 6th and 7th May, and the vessel had sailed for Mena al Ahmadi on the 2nd May, the Royal Norwegian Ministry of Social Affairs was informed and a radio message prescribing suitable treatment was sent to the ship.

The m.v. "Vestfonn" bound for Stanlow arrived from London and Rotterdam and anchored off the Bar on the 13th June. The Master reported that a case of typhoid fever had been removed to hospital at Gibraltar on the 28th May, and that a case of Sonne dysentery had been removed to hospital at London on the 8th June. A further case of Sonne dysentery from the vessel was removed to Fazakerley Hospital on 15th June. The fresh water supply was taken at Gibraltar on the 29th May and at Thameshaven on the 8th June. The water had been tested at Thameshaven and found to be satisfactory. The vessel was boarded by a port medical officer and later proceeded to Stanlow. Specimens of faeces were taken from the crew and submitted for bacteriological examination. Shigella sonnei was present in one of the specimens submitted by a member of the crew who was later admitted to Clatterbridge Hospital, Cheshire, on the 22nd June.

The m.v. "Bianca" arrived from Szczecin via Kiel Canal on the 24th September. The Master and six members of the crew were suffering from enteritis. Samples of food and swabs from the galley and equipment were taken, but no organisms of the salmonella or dysentery groups and no staphylococcus pyogenes were found in any of these samples. Samples of water were submitted for bacteriological examination and proved to be satisfactory. Specimens of faeces were taken from the crew and shigella sonnei were found to be present in two of the specimens submitted for examination. As the laboratory report was not received until 28th September and the vessel had sailed for Swansea and Rotterdam on the 27th September, the Port Medical Officers of these ports were informed.

The s.s. "Grecian" arrived from Mediterranean ports on the 26th November. Seven cases of enteritis were reported during the voyage, all of whom had recovered on arrival and proceeded on leave. Five samples of fresh water were taken and submitted for bacteriological examination, two of which were considered to be unsatisfactory. Chlorination was carried out and further samples taken, but the water from two sources was still considered to be unsatisfactory. Officials of the Ministry of Transport and owners were informed and the owners were advised not to use water from the sources concerned until further treatment had been carried out and the water proved satisfactory. The owners stated that chlorination would again be carried out, but the ship sailed before further samples could be obtained.

Weil's Disease

The m.v. "Tuskar" arrived from Waterford on the 21st March and the Master reported that a member of the crew had been removed to hospital at Waterford on the 17th March suffering from Weil's disease. The patient had joined the vessel at Liverpool on the 17th March. Samples of water taken from the ship were submitted for bacteriological examination and all proved to be satisfactory. Disinfection was carried out and no further cases of sickness were reported.

Anthrax

The s.s. "Jalvallabh" arrived from India via Manchester on the 16th May. On the 20th May a member of the crew was removed to Fazakerley Hospital, and found to be suffering from anthrax. The ship's cargo had included both hides and wool. Disinfection was carried out and the Master advised to wash the holds, and to issue gloves to members of the crew working in cargo spaces where wool and hides had been stowed. No further cases of sickness were reported. The vessel sailed for Middlesbrough on the 21st May.

On the 9th October a dock labourer, living in Liverpool, was admitted to Fazakerley Hospital and found to be suffering from Anthrax. On the 4th and 5th October he had been engaged loading general cargo in the m.v. "Derrynane" from Limerick, and on the 7th October employed discharging and loading the s.s. "Conister" from Douglas. During the course of these duties he had handled bales of rags and wool, and bundles of empty bags in the s.s. "Conister" and general cargo including bundles of hessian bags in the s.s. "Derrynane". Earlier in the week the s.s. "Derrynane" had discharged bales of raw wool, sacks of rag cuttings, junk bagging and bags of hide pieces. The hides were carried on deck, which was washed down after discharge. Washing facilities were provided in the dock sheds. No further cases were reported.

TABLE D

The number of cases of infectious disease landed from vessels arriving at Liverpool and those occurring in Liverpool-bound ships which were disposed of before arrival, are shown in the following tables:

TABLE D

CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS DURING 1963

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
Quarantinable Diseases			
Cholera	—	—	—
Plague	—	—	—
Smallpox	—	—	—
Typhus Fever	—	—	—
Yellow Fever	—	—	—
Other Infectious Diseases			
Anthrax	—	1	1
Chickenpox	2	2	4
Dysentery	—	3	2
Gastro-enteritis	2	11	5
German Measles	2	1	2
Glandular Fever	—	1	1
Infective Hepatitis	2	—	2
Influenza	1	2	3
Malaria	1	6	7
Measles...	3	1	3
Mumps	1	2	2
Pneumonia	1	3	3
Pyrexia (unidentified)	—	3	3
Tuberculosis	—	4	4
Whooping Cough	1	—	1
Total	16	40	43

CASES OF INFECTIOUS SICKNESS OCCURRING IN VESSELS DURING THE VOYAGE BUT DISPOSED OF PRIOR TO ARRIVAL. YEAR 1963

Diseases	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
Quarantinable Diseases			
Cholera...	—	—	—
Plague	—	—	—
Smallpox	—	1	1
Typhus Fever	—	—	—
Yellow Fever	—	—	—
Other Infectious Diseases			
Chickenpox	4	10	9
Dysentery	—	4	4
Gastro-enteritis	—	47	3
German Measles	5	—	3
Influenza	1	1	2
Measles...	9	—	7
Mumps	2	2	4
Paratyphoid Fever	1	—	1
Pneumonia	1	1	2
Tuberculosis	—	2	2
Typhoid Fever...	—	1	1
Total	23	69	39

CASES LANDED FROM COASTWISE VESSELS

Disease	No. of Cases during Year		No. of Vessels concerned
	Passengers	Crew	
Chickenpox	1	—	1
Total	1	—	1

SECTION X

OBSERVATIONS ON THE OCCURRENCE OF MALARIA IN SHIPS

The use of malarial suppressants in ships entering the port from affected areas has continued to keep the incidence of this disease at a low figure. Seven cases of malaria or suspected malaria were reported from seven ships during the year.

SECTION XI

MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE

There were no cases, or suspected plague in ships arriving in the port of Liverpool during 1963.

SECTION XII

MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS

The port is divided into four districts which are shared between the port health inspectors as the staffing position permits. A rat searcher and a rat catcher are allotted to each district: the rat searcher is responsible for searching for evidence of rats, and the rat catcher for dealing with rat infestation. Each rodent operative is given specific tasks daily, to be carried out at set times, and the work is checked by cross visits.

Foreign-going ships entering the port are visited by a port health inspector and a rat searcher as soon as possible after docking. Traps are set in all ships from infected ports, and in all foreign-going ships when rat evidence is reported where time in port permits.

In view of the reduced danger from plague, the only rats now sent for bacteriological investigation are a small number caught in ships from a plague port, or rats found dead near these ships.

Ratguards

Foreign-going ships, whether arriving from abroad, or proceeding coastwise, are visited on arrival by a port health inspector, and advised to fit ratguards on all moorings. Ratguards should be of sheet metal at least three feet in diameter, with sharp edged circumference, or instead the mooring ropes may be parcelled with canvas, or sacking coated with tar. This tar must be kept in a sticky condition. Ships' officers are also advised not to leave cargo nets hanging between the ship and shore at night.

Deratting

Deratting in ships is accomplished by:—

(1) Routine trapping by port health rat catchers.

(2) Trapping and/or poisoning by rat catchers employed by the shipping companies.

(3) Fumigation with hydro-cyanic acid gas or sulphur dioxide. This method is alone approved for the issue of the International Deratting Certificate. Rodenticides are not approved for this purpose in the port of Liverpool. The contractors undertaking this work are as follows:—

(a) **Ratcatching**

Rentokil Laboratories Limited.
Hivey Fumigation Company.
A. Sewell.

(b) **Fumigators**

Rentokil Laboratories Limited.
Hivey Fumigation Company.

Deratting in dock premises is accomplished by:—

(1) Routine trapping by port health rat catchers.

(2) Routine trapping and poisoning by rat catchers employed by the Mersey Docks and Harbour Board.

(3) Trapping and poisoning by private rat-catching firms employed by shipping companies and warehouse owners.

Examination of Ships for Rats

This is accomplished by enquiries and search by port health rat searchers, who search foreign-going ships on arrival and also make periodic searches during the discharge of cargo. Any ship for which a deratting or deratting exemption certificate application has been made, is searched throughout when the cargo spaces are empty. Six hundred vessels were so examined in 1963. Immediate investigation is undertaken of reports from ships' masters and other officers, dock workers, and privately-employed rat catchers.

Rat Proofing

When temporary or permanent rat harbourage is discovered in ships, the master and the owners (or agents) are informed and advised how to eliminate it: every effort is made to see that vessels are made reasonably ratproof before a deratting exemption certificate is issued.

Regular surveys are made of all premises in the vicinity of ships, and no unnecessary accumulations of stores or gear are permitted.

TABLE E

RATS DESTROYED

Rodents Destroyed During the Year 1963 in Ships from Foreign Ports

Category	Number
Black Rats	265
Brown Rats	1
Species not known	—
Sent for examination	68
Infected with plague	—

Rodents Destroyed During the Year 1963 in Docks, Quays, Wharves and Warehouses

Category	Number
Black Rats	752
Brown Rats	739
Species not known	—
Sent for examination	—
Infected with plague	—

Number of mice destroyed in vessels	202
Number of mice destroyed on quays	569
Number of mice examined from vessels and quays	48

In addition to the above, 2,589 rats and 58 mice were caught and destroyed by the Dock Board rat catchers and private agencies.

Number of Visits to Vessels by Rat Catchers	4,341
Number of Visits to Vessels by Rat Searchers	6,700
Number of Visits to Quays, Sheds, etc., by Inspectors ...	2,256
Number of Visits to Quays, Sheds, etc., by Rat Searchers ...	2,444
Number of Visits to Quays, Sheds, etc., by Rat Catchers ...	24,587

TABLE F

DERATTING CERTIFICATES ISSUED

Deratting Certificates and Deratting Exemption Certificates Issued During the Year 1963

Number of Deratting Certificates issued after Fumigation with			After Trapping, Poisoning, etc.	Total	No. of Deratting Exemption Certificates issued	Total Certificates issued
H.C.N.	Sulphur	H.C.N. and Sulphur				
33	4	—	—	37	563	600

SECTION XIII

INSPECTION OF SHIPS

Owing to the continued shortage of qualified port health inspectors, it was not possible to inspect all foreign-going ships entering the port, but careful attention was given to statutory requirements, and ships were inspected whenever possible in the following order:—

(1) Ships known to have had infectious sickness aboard.

(2) Ships from infected ports.

(3) Ships from foreign ports.

(4) Foreign-going ships from home ports.

(5) Coasters.

Special attention was given to ships which required deratting or deratting exemption certificates, and to ships concerning which any special information had been received from the Ministry of Transport, owners, agents, ship masters, trade unions, or crews.

During the year the method of reporting ship inspections was altered from report books to the following card index system:—

LIVERPOOL PORT HEALTH AUTHORITY

Date..

Name of Vessel..

Class .... Tonnage ....

Nationality.. Dock ....

From .... Cargo ....

Owners/Agents..

Inf. supplied by..

Water from..

Tanks cleansed .... Bilges cleansed ....

Int. Deratting Cert. ....

Date of Cert.. Memo left YES/NO

Ratguards FITTED/ORDERED

*Sickness during voyage YES/NO Sickness aboard now YES/NO Crew's quarters clean and in good order YES/NO

Defects and General Remarks:..

....

....

....

....

....

....

Memo left YES/NO

Date of re-visit............................ Nuisance abated YES/NO

*See over

....

Inspector

Infected Ports YES/NO Last Port.......... Arrived ....

Diagnosis by.......... To .... Sailing ....

Case(s) of	Name	Age	Onset	Rating	Disposal	Address

Date of disinfection.......... Method .... Bedding Dis. by..........

Which quarters disinfected ....

Contacts .... No. of others with similar symptoms..........

No. of F. Specimen cartons left .... No. returned..........

No. of samples of water taken.......... No. of samples of foodstuffs taken..........

Vaccination Certificates checked YES/NO Date of survey for $\frac{\text{DERATTING}}{\text{EXEMPTION}}$ ....

During the year it was found that the improvement in crew accommodation and catering facilities previously reported has been maintained with a corresponding decrease in sanitary defects.

The attention of the ship's master or officer-in-charge is drawn to any defect found and a verbal request made for it to be remedied. A written memorandum is left on board and if it is considered advisable, a letter detailing the defects is sent to the shipowner or agent. Whenever it is not practicable to abate a nuisance during the vessel's stay in Liverpool and the ship is proceeding to another British port, notification is sent to the medical officer of the port concerned.

TABLE G

INSPECTIONS AND NOTICES

Year 1963

Nature and Number of Inspections		Notices Served		Result of Serving Notices	
		Statutory	Other Notices		
Nature of Inspection					Nuisances
Dirty Crew Quarters	—	none	80	80	Remedied
Verminous Quarters...	—	,,	324	302	,,
Dirty Washhouses or W.C.'s ...	—	,,	8	8	,,
Foul Water Tanks	—	,,	—	—	,,
Foul Bilges	—	,,	—	—	,,
Foul or Choked W.C.'s	—	,,	7	7	,,
Accumulations of offensive refuse ...	—	,,	32	32	,,
Dirty Pantries and Galleys	—	,,	16	16	,,
Dirty Storerooms	—	,,	—	—	,,
Leaky Deckheads	—	,,	2	2	,,
Defective Heating System	—	,,	1	—	,,
Defective Bulkheads...	—	,,	—	—	,,
Defective Portlights, Skylights, etc.	—	,,	—	—	,,
Defective or Inadequate Ventilation	—	,,	1	1	,,
Defective Deck Covering	—	,,	1	1	,,
Gear Stowed in Crew's Quarters ...	—	,,	1	1	,,
Damp Quarters	—	,,	7	7	,,
Rat Harbourage	—	,,	—	—	,,
Defective W.C. Fittings	—	,,	7	7	,,
Defective Soil Pipes	—	,,	2	2	,,
Defective Waste Pipes or Scuppers	—	,,	4	4	,,
Defective Washing Facilities ...	—	,,	—	—	,,
Inadequate Lighting	—	,,	—	—	,,
Smoke Nuisances	—	,,	45	45	,,
W.C.'s discharging on Quay ...	—	,,	75	75	,,
Miscellaneous...	—	,,	7	6	,,
Number of Inspections	3,794				
Total	3,794	—	620	596	,,

NATIONALITY OF SHIPS VISITED

YEAR 1963

Nationality	Visits	Re-visits	Total
British	2,341	75	2,416
Dutch	197	—	197
Norwegian	196	1	197
German	173	1	174
Spanish	106	—	106
Swedish...	103	1	104
Danish	96	1	97
Liberian...	90	2	92
Greek	73	6	79
American	59	2	61
Russian	47	—	47
Finnish	36	—	36
Japanese	35	1	36
Belgian	30	—	30
Polish	28	—	28
Turkish...	27	—	27
Italian	22	—	22
Panamanian	21	—	21
Argentinian	19	—	19
Yugoslavian	13	—	13
French	11	—	11
Sudanese	10	1	11
Israeli	9	—	9
Swiss	9	—	9
United Arab Republic	9	—	9
Chilean...	8	—	8
Lebanese	6	—	6
Iraqi	4	—	4
Cuban	3	1	4
Uruguayan	3	1	4
Icelandic	3	—	3
Roumanian	2	—	2
Brazilian	1	—	1
Czechoslovakian	1	—	1
Iranian	1	—	1
Philippine	1	—	1
Portuguese	1	—	1
Totals	3,794	93	3,887

INSPECTION OF DOCK PREMISES

Routine inspection of dock premises was maintained during the year and the following defects and nuisances were observed and remedied.

Description of Premises	Defective or Inadequate					Structural Defects	Rat Harbourage	Rat Infestation	Accumulated Refuse	Noxious Effluvia	Dirty Conditions	Verminous Conditions	Damp Conditions	Water Supply	Miscellaneous
	Lighting	Heating	Ventilation	W.C. Accommodation	Drainage										
Dock Sheds	—	—	—	—	1	—	49	84	65	—	38	—	—	—	—
Quays ...	—	—	—	—	—	—	9	4	110	—	2	1	—	—	—
Roadways ...	—	—	—	—	—	—	1	—	208	—	7	—	—	—	—
Canteens ...	1	—	2	2	22	12	2	10	2	—	17	2	1	1	25
Factories ...	—	—	—	—	1	—	4	11	—	—	—	—	—	—	—
Warehouses	—	—	—	—	—	—	12	28	—	—	—	—	—	—	—
Latrines ...	—	—	—	3	20	—	—	—	—	—	40	—	—	2	—
Airport ...	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Offices ...	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Total ...	1	—	2	5	44	12	77	139	385	—	104	3	1	3	25

Rebuilding and modernisation of premises in the entire port area is still proceeding.

THE FOOD HYGIENE (DOCKS CARRIERS, ETC.) REGULATIONS, 1960

These Regulations provide that every berth where open food is handled should be clean and suitable and that appropriate equipment, washing facilities and protective clothing for dock workers are provided.

The Mersey Docks and Harbour Board informs the Port Health Authority of the arrival of ships carrying open food, and the proposed berth at which the consignment will be discharged. The berth is then inspected for suitability and cleanliness and any appropriate recommendations made. Washing facilities should be provided at all berths where open food is handled; at present, in this port, these consist of waterless hand cleaners.

During the year 146 ships arrived in the port carrying consignments of "open food", and in each case the berth was inspected prior to discharge. Unfortunately the majority of ships carrying consignments of "open food" are loaded with "mixed cargoes" and it is seldom that a cargo consists entirely of unprotected carcases of meat or other open food. This often presents difficulties in ensuring that the berth is clean, and cleared of anything which could cause contamination. On 97 occasions the proposed berths required cleansing, and previous cargoes were removed from the site, or other berths allotted before discharge of open food commenced.

Special handling equipment is also necessary for this type of cargo, and consultations have taken place with firms engaged in this work. Although some progress has been made, it is felt that there is still room for improvement.

SECTION XIV

PUBLIC HEALTH (SHELLFISH) REGULATIONS, 1934/48

Warning notices that "Shellfish taken from this area are likely to be polluted, and could cause serious illness to those consuming them", were re-erected at suitable sites on the Lancashire and Cheshire approaches to the shores.

A cockle merchant at Scarisbrick, whose premises and apparatus were approved under the Shellfish Order, has continued to clean and sell shellfish, collected from the port area. A merchant at Hoylake has advised us that he is not at present treating and cooking cockles.

THE CLEAN AIR ACT, 1956
and
DARK SMOKE (PERMITTED PERIODS) (VESSELS) REGULATIONS, 1959

During 1963 the attention of the Master or Chief Engineer of 45 vessels was drawn to the above Regulations. In every case the nuisance was abated, and no proceedings were instituted.

DOCK CANTEENS

The port health staff is responsible for the inspection of dock canteens. During the year under review 1,042 separate inspections were made and 99 defects noted and abated.

RADIOACTIVE MATERIALS

All ships visiting the port and carrying this type of cargo were visited by a port health inspector.

The amount of radioactive cargo, storage, handling, destination, marking of packages, condition and compliance with Ministry of Transport "Blue Book" requirements and International regulations are all noted.

Number of ships visited loading radioactive cargo.. ...	76
Number of ships visited discharging radioactive cargo ...	49
Total	125

SECTION XV

MEDICAL INSPECTION OF ALIENS AND COMMONWEALTH IMMIGRANTS

Medical Officers holding Warrants of Appointment as medical inspectors of Aliens and Commonwealth Immigrants are:—

Professor Andrew B. Semple,

Dr. J. B. Meredith Davies,

Dr. T. L. Hobday,

Dr. A. J. Graham,

Dr. W. Drawneek,

Dr. S. Smith,

Dr. D. E. Phillips,

Dr. M. J. O'Brien.

No other staff are regularly engaged on this work, though the medical officers may be assisted by health visitors from the City staff when necessary. Normally, immigration officers refer to the medical officers any passengers whom they have reason to believe may require examination under the Aliens Order or the Commonwealth Immigrants Act; a medical officer is therefore always present during the disembarkation of passengers from trans-Atlantic liners.

The following table gives the total number of aliens arriving in the port of Liverpool during 1963 and the number of each of the categories under which alien passengers are classified by the Immigration Department of the Home Office: —

	Visitors	Business Visitors	Others	Total
Seaport	4,953	39	2,066	7,058
Airport	262	89	847	1,198
Total	5,215	128	2,913	8,256

Total number of vessels carrying Alien passengers	1,130
Number of vessels dealt with by the Medical Inspector	141
Number of aircraft dealt with by the Medical Inspector	4
Total number of aliens landed in the Port	8,256
Number subjected to detailed examination by Medical Inspectors...	141
Certificates issued by Medical Inspectors	4
Total number of Commonwealth Immigrants landed in the Port ...	7,977
Number medically examined	641
Certificates issued by Medical Inspectors	4

Medical inspection of alien and commonwealth immigrant pasengers is normally conducted either in the ship itself, or, in relation to aircraft, in the examination room at Liverpool Airport.

MISCELLANEOUS

ASSOCIATION OF PUBLIC HEALTH INSPECTORS

ANNUAL CONFERENCE

Mr. McCoy, Chief Port Health Inspector, attended the Annual Conference of the Association at Eastbourne. He presided as Chairman at sessions, sponsored by the Sea and Airport Health Inspectors' Branch, which dealt with matters of interest to port health inspectors.

FOOD INSPECTION

DESICCATED COCONUT FROM CEYLON

The improvement in the bacteriological standard of this commodity, resulting from the action taken by the Government of Ceylon, which was the subject of comment in the Annual Report of last year, became, during 1963, much more apparent.

The ratio of salmonella infected samples to the number of samples submitted for examination to the Public Health Laboratory fell to a record low figure.

Reference to the Annual Reports of 1961 and 1962 shows that a system of control by this Authority was put into operation on the 1st January, 1961. This system involved the routine detention of all consignments other than those intended for submission to sterilising processes at certain approved establishments. All the detained consignments were sampled and any consignments shown to be infected by designated salmonellae were rejected. This procedure was followed throughout the years 1961 and 1962, and up to the 19th June, 1963. On that date the situation was reviewed, and because of the facts which were ascertained from a study of the available figures (set out in a table included in this report) it was decided that it was no longer necessary to operate such a rigorous method of controlling the standard of this product. Accordingly, in June 1963, the detention of all desiccated coconut arriving in the Port of Liverpool from Ceylon, followed by the systematic sampling of each consignment, was suspended and a system of periodic check sampling, without detention, was substituted.

This system was operated from that date to the end of the year, and the results of the consequent bacteriological examinations are set out in the table to which reference has already been made. The decision to amend the procedure was communicated to all parties having an interest in the bacteriological standard of coconut, including the Ceylon Coconut Board and the Medical Research Institute of Ceylon. It was clearly intimated, in these communications, that the continuance of the procedure would be dependent upon the maintenance of the good bacteriological standard which had lately been achieved, and that any significant deterioration could lead to the re-imposition of the detention-sampling system

Desiccated Coconut from Ceylon

Table showing the incidence of infection by salmonellae during the year 1963 and comparison with the years 1961 and 1962

Period	Samples taken		Designated salmonellae found		Non-designated salmonellae found		Total salmonellae found	
	Number	% of the no. of packages imported	Number found	% of the no. of samples taken	Number found	% of the no. of samples taken	Number found	% of the no. of samples taken
The Year 1961 ...	10,109	7·8%	70	0·69%	319	3·15%	389	3·84%
The Year 1962 ...	6,430	4·91%	46	0·716%	121	1·881%	167	2·597%
January 1st to June 19th 1963 ...	2,229	4·14%	3	0·134%	5	0·224%	8	0·358%
		% of packages sampled, based upon consignments examined						
June 20th to December 31st 1963	333	3·8%	2	0·6%	2	0·6%	4	1·2%
Total for 1963 ...	2,562	4·09%	5	0·195%	7	0·273%	12	0·468%

Desiccated Coconut from Ceylon released, without being sampled, to approved sterilising establishments

Between January and June, 1963, 689 packages of desiccated coconut, comprising 148 consignments, were dealt with in accordance with the arrangements referred to above. The Medical Officers of the districts concerned were notified in each instance so that they could arrange for the proper supervision of the sterilising processes involved.

Mould and rancidity in desiccated coconut

The vessel "Maipura" arrived in Liverpool from Ceylon in June, 1963 and discharged 60 × 130-lb. chests of fine desiccated coconut and 53 × 130-lb. chests of medium desiccated coconut. A number of chests were opened for examination by the food inspector, and it was seen that the contents were affected by mould and rancidity. The consignment was detained, and removed to the consignee's Liverpool warehouse for a 100% examination. 41 chests fine grade and 28 chests medium grade, totalling 61% of the consignment, were found to be mouldy and rancid. These were rejected as unfit for human consumption. This quantity was eventually delivered to Horwich, Lancashire, for use as animal food with the consent of the appropriate medical officer of health.

Desicated Coconut from the Friendly Isles (Tonga)

During 1963, four consignments, consisting of 2,366 packages, were landed and 45 samples were taken. None of them contained salmonellae.

Desiccated Coconut from the Philippines

During 1963, seven consignments consisting of 2,047 packages were landed and 20 samples were taken. None of them was found to be positive for salmonellae.

In both these cases sampling was carried out on a random check basis and none of the coconut was detained to await laboratory reports.

MEAT AND MEAT PRODUCTS

Meat from New Zealand

In March this Authority received a communication advising that a quantity of frozen meat, part of the cargo of the "Port Pirie" had been found, on discharge at another port, to be tainted by dichloro-phenol, a pungent chemical which had been carried in drums in the same hold at upper tween deck level, outward to New Zealand. This information resulted in a most extensive examination and inspection of all the meat cargo when the vessel arrived at Liverpool later in the month. During the early stages of discharge no taint was detected, but when the carcases contained in the refrigerated lockers at the upper tween deck level of No. 3 hold, adjacent to the space in which the drums of dichloro-phenol had been stowed on the outward voyage, were discharged, a dichloro-phenol taint was in fact detected. A total of 3,518 lamb carcases and 1,037 mutton carcases was found to be affected by the taint and was sent to firms in the London area, with the consent of the appropriate medical officers of health, for defatting and any other necessary reconditioning or processing.

The vessel "Port Nicholson" arrived in this port in September and discharged a consignment of 1,457 cartons of boneless mutton. Examination of this consignment revealed that in addition to the lymphatic glands and some of the serous membranes being removed during boning out and defatting, there was a proportion of prohibited "scrap" meat present, and as a result 5,700-lbs., 6.5% of the consignment, were rejected as prohibited meat under the provisions of the Imported Food Regulations, 1937. The rejected meat was later sent for conversion into pet food, after sterilisation.

A second consignment of 485 cartons boneless mutton, showing the same fault, arrived in the vessel "Waipawa" in November. As a result of the examination of this consignment, 3,600-lbs., 12.3% of the consignment, were rejected as prohibited meat and were also sent for conversion into pet food, after sterilisation.

Meat from Australia

The vessel "Canada" arrived here from U.S.A. in July. Among the cargo was a consignment of 560 cartons of Australian frozen mutton. Examination showed that not only had the meat been defatted and boned and all the lymphatic glands removed, but there was also a considerable amount of prohibited "scrap" meat present. A detailed examination of ten cartons was therefore undertaken which showed percentages of scrap meat varying from 2.5 to 11.6% to be present. The consignment was therefore rejected as prohibited meat under the Imported Food

Regulations, 1937 and was re-exported. Investigations revealed that this consignment had originally been intended for importation into the United States where there was a demand for Australian exporters to supply boneless mutton from which all the fat, the lymphatic glands and serous membranes had been removed, but no reason was given why this consignment had not been retained in the U.S.A.

The vessel "Queensland Star" arrived in Liverpool in November and a consignment of 200 cartons of boneless mutton was discharged. Examination of this consignment revealed infection with caseous lymphadenitis and as a result 301-lbs. of meat, 2.24% of the consignment, was rejected as unfit for human consumption.

Importation of Edible Fats in Bulk

Forty-nine ships arrived from the U.S.A. bringing 193 consignments, weighing 96,254 tons, of lard in bulk and one ship arrived from France bringing three consignments of bulk lard, weighing 300 tons.

One ship, the "City of Winnipeg", arrived from New South Wales, Australia, and discharged one consignment of edible beef tallow in bulk, weighing 84 tons. Two samples were submitted to the City Analyst and were found to be satisfactory. This was the first instance of this commodity being imported through Liverpool from Australia.

RECOGNISED OFFICIAL CERTIFICATE PROCEDURE

Meat from Hong Kong

Our experiences of 1962 in relation to meat and meat products from this source continued during 1963 and the following incidents illustrate this:

The vessel "Patroclus" arrived in Liverpool from Hong Kong in January. Among the cargo was one case of dried beef which did not have the Recognised Official Certificate attached to the package. The case was not therefore permitted into this country and was later re-exported to Hong Kong.

In February a second consignment, consigned to the same importer, arrived in the vessel "Elpenor". The consignment was made up of various items of foodstuff, including ten cartons and eight cans of dried beef and ten cans of sausage. Again no Recognised Official Certificate was attached to the packages containing meat and these were re-exported to Hong Kong.

A third consignment comprising eight cases canned stewed pork, two cases canned stewed beef, two cases canned curried beef and two cases canned pork and mushroom sauce was brought to Liverpool aboard the vessel "Peleus" in April. Again no Recognised Official Certificate was attached to the packages and the consignment was re-exported to Hong Kong.

A fourth consignment of three cases each containing ten cans of sausage and pork arrived in the vessel "Melampus" in October and again there was no Recognised Official Certificate and the consignment was re-exported to Hong Kong.

Meat and Meat Products from Belgium

The vessel "Zephyr" arrived in Liverpool in March and discharged one drum of edible oleo stearine to which there was no Recognised Official Certificate attached. The importing firm stated that this drum was a sample of a larger quantity of stearine and was to be submitted to examination and analysis. The importers were allowed to take a small quantity for examination and analysis and the remainder of the contents of the drum was released under guarantee that it would be used only for purposes other than for human consumption. An undertaking was also given that the matter of correct certification would be taken up with the Belgian shippers should there be a possibility of future shipments.

Meat and Meat Products from Southern Rhodesia

In April, the vessel "Clan Macgregor" discharged 350 cartons, each containing 24 × 16-oz. cans, of sausages. On examination it was observed that the cartons did not have the Recognised Official Certificate attached and the consignment was detained. On receipt of a cablegram from the Southern Rhodesian Veterinary Department, stating that the consignment conformed with British Health and Veterinary Standards, the consignment was released. A further 350 cartons of the same commodity, the balance of the shipment, were discharged from the vessel "South African Seafarer" later in April and again the Recognised Official Certificate had been omitted. Unfortunately this consignment was already in transit when the first omission was discovered and it was therefore released on arrival, as the cablegram mentioned above covered both shipments.

Meat and Meat Products from U.S.A.

The vessel "Birgit Ragne" arrived in Liverpool in June and discharged three tierces of cleansed ungraded pork casings to which there was no Recognised Official Certificate attached. The consignment was detained and released when a meat inspection certificate issued by the United States Department of Agriculture was produced.

In October the vessel "American Clipper" arrived here and a consignment of four drums of lard oil was discharged. Examination of the consignment revealed that no Recognised Official Certificates were attached to the drums and the consignment was released only when the consignee produced evidence that this consignment was to be used as a nutrient in the preparation of the moulds from which antibiotics are derived, backed by a written guarantee that it would not be used in the preparation of food for human consumption.

Meat and Meat Products from Australia

The vessel "Laertes" arrived in this port in December with a consignment of 108 drums of edible beef oleo stearine to which there was no Recognised Official Certificate attached. The consignment was released on the production, by the consignee, of a bulk certificate signed by the Australian Officer of the Department of Primary Industry, and a warning letter was sent to the consignee.

Meat and Meat Products from Denmark

The vessel "Sycamore" arrived here early in August from Canada and a consignment of 500 cartons, each containing 24 × 12-oz. cans of luncheon meat was discharged. This consignment had originally been intended for importation into Canada but was rejected there because it was said to contain too high a percentage of starch in relation to the meat content. On the cans the ingredients were listed as follows: pork, 10% beef, pork stock, potato starch, sodium and potassium nitrate and colouring matter. The goods were then re-directed to this country but the packages had no Recognised Official Certificate attached, which rendered them ineligible for importation. The consignment was therefore re-exported to Denmark. A second consignment of the same commodity arrived under similar circumstances in the vessel "Beechmore" late in August. The consignee made this consignment the subject of a "transit" customs entry, which permitted the consignment to be landed here only for the purpose of transhipment to Denmark.

Meat and Meat Products from South Africa

The vessel "South African Shipper" arrived in Liverpool late in August and discharged a consignment of 1,250 cartons, each containing 48 × 7-oz. cans of corned beef. On examination it was observed that the cartons bore certificates which were not in the form of the Official Certificate of the country of origin and they were therefore detained and later re-exported to South Africa.

Meat and Meat Products from the Federal Republic of Germany

On the 1st February, 1963, the Recognised Official Certificate hitherto used by the Federal Republic of Germany was replaced by a new certificate. After allowing a reasonable amount of time to elapse for all those concerned to learn of the changeover, consignments of meat and meat products were still being discharged in Liverpool, bearing the old certificate. A letter was sent to the German Consulate drawing their attention to this breach of the regulations and asking for their co-operation in rectifying the matter. They stated that the matter would be taken up with the appropriate government department in the Federal Republic.

EGG AND EGG PRODUCTS

Egg and Egg Products from Australia

No consignments of egg or egg products were landed from this country whereas thirteen consignments were brought in during 1962.

Egg and Egg Products from Holland

No consignments of egg or egg products were landed from Holland during 1963.

Egg and Egg Products from U.S.A.

During the year seven consignments, consisting of 847 packages, of dried egg albumen were landed from vessels from U.S.A. Fifty-one samples were submitted for bacteriological examination and no salmonellae were found in any of these samples.

In addition, two consignments, amounting to 50 cartons totalling 600 packets, of cake mixes and frosting mixes containing dried egg, were landed. Eight samples were submitted for bacteriological examination and no salmonellae were found in any of these samples.

One sample from each of the above two consignments was submitted for examination under the provisions of (a) The Colouring Matter in Food Regulations, 1957, and (b) The Antioxidants in Food Regulations, 1958. The analyst's report showed no contravention of these Regulations as only permitted artificial colouring matter was present in both samples, and a permitted antioxidant, within the limit allowed, in one of them (the cake mix).

Pasteurised Egg from Denmark

One consignment of pasteurised dried whole egg, consisting of 60 packages, was landed from a vessel arriving from Denmark. Six samples were submitted for bacteriological examination and no salmonellae were found in any of these samples.

Egg Products from Canada

One consignment, consisting of 70 cartons totalling 840 packets, of cake mix containing dried egg, arrived from Canada. Seven samples were submitted for bacteriological examination and all were negative for salmonellae.

It is of interest to note that the above consignment was processed and packed at an establishment in Ontario from which we received two consignments in the year 1962. In eight out of the ten samples taken from those consignments, Salmonella thompson was found to be present, and the consignments were destroyed by burning.

A consignment, containing 600 cartons, of Lemon pie filling containing egg yolks, arrived from Canada. Two samples were submitted for bacteriological examination and no salmonellae were found in either of these two samples. One sample was also submitted to the City Analyst for examination under the Colouring Matter in Food Regulations, 1957. It, in fact, contained a permitted artificial colouring matter.

Egg Products from Hong Kong/China

Three consignments of Chinese Egg Noodles, amounting to 55 packages, arrived from Hong Kong. Thirty-two samples were submitted for bacteriological examination and no salmonellae were found in any of these samples.

The Liquid Egg (Pasteurisation) Regulations, 1963

These Regulations, which were issued during 1963, will, when they become operative on the 1st January, 1964, require all imported liquid egg to have been pasteurised and to pass the alpha-amylase test as prescribed by the Regulations. Suitable equipment for carrying out the necessary sampling was purchased in September, as the Regulations lay the duty of enforcement, so far as importation is concerned, upon Port Health Authorities. Letters were sent to various firms and other interested bodies drawing their attention to the requirements of these Regulations.

FISH AND FISH PRODUCTS

Crustacea

Numerous consignments of frozen prawns and shrimps, originating from various sources including Japan, Mexico and South America arrived in this port during the year. Each consignment was examined for satisfactory appearance and smell, and bacteriological tests were made. As in previous years, these tests consisted of a plate count, an estimation of B. coli and other coliform organisms, and a culture. No rejections were made during the year, though on several occasions warning letters were sent to importing firms.

There is no doubt that the standard of cleanliness, relating to these commodities, has greatly improved in the last two years. Plate counts, at one time frequently exceeded 1,000,000: they are now, on occasion, less than 100.

Mussels from Eire

The vessel "Derrynane" arrived in Liverpool on the 26th November and discharged a cargo of 71 bags of mussels. Inspection of this consignment showed that none of the bags bore a certificate to indicate that the mussels had been treated at a recognised cleansing station. On enquiry the inspector was informed that it was intended that they should be used only for bait in the fishing industry. The consignee was, however, known to this department as a dealer and processor of shellfish intended for human consumption.

The Health Department of Lytham St. Annes was informed of the situation. The mussels were later found on a vehicle in the yard belonging to the consignee who stated that they were awaiting delivery to a customer on the East coast who used them only for bait. They were sampled at Lytham and the bacteriologist's report stated that the sample was of grade 2 mussels, there being 11 B coli Type 1 (faecal) per millilitre of tissue.

A further consignment of 77 bags of uncertificated mussels arrived in the vessel "Oranmore" from Eire, under similar circumstances, on the 3rd December. This was also referred to Lytham St. Annes and the consignee was informed that it was not reasonable to store mussels, suitable only for bait, at his premises, while at the same time he was handling mussels for human consumption. The proprietor of the business then gave an undertaking not to have any further consignments of bait mussels delivered to his premises in Lytham. No further deliveries of such mussels have been sent to this consignee through Liverpool.

The vessel "Munster" arrived in Liverpool from Sligo on the 20th November and discharged a consignment of 25 bags of mussels consigned to a firm in Crosby. This consignment was also found on inspection to consist of uncertificated bags of mussels, and the Health Department of Crosby was informed by telephone of their delivery. A certificate from the Medical Officer of Sligo was apparently held by the consignee showing that the layings, from which the mussels had originated in Kellystown, were clean. A sample was taken at Crosby for bacteriological examination. This showed that the mussels were grade 1 and contained no faecal coli.

Uncertificated mussels occasionally arrive in vessels from Eire, consigned to firms engaged in the fishing industry on the East coast. The Health Department of Scarborough has been notified of these consignments: none of the firms receiving the mussels are concerned with their sale for human consumption.

FRESH FRUIT AND VEGETABLES, ETC.

Severe winter conditions experienced during late December 1962, and January, February and early March, 1963, resulted in increased numbers of rejections of fruits, vegetables, and commodities carried in bags, such as coffee and cocoa beans, groundnut kernels, rice, etc., as compared with other years. In relation to fruit and vegetables, the rejections were the result of the breakdown of the foodstuffs caused by their exposure to extremely low temperatures. Rejections of bagged commodities were, in most cases, due to excessive condensation. The following are some of the outstanding rejections.

Carrots from Canada

The vessel "Eva Jeanette" arrived at Liverpool in February and discharged a consignment of 26,282 bags of carrots. A considerable number of these carrots were in a state of decomposition and many of the bags had disintegrated. A total of 82 bags, weighing 4,460-lbs., and loose carrots, weighing 9,960-lbs., was rejected.

The vessel "Rathlin Head" arrived in Liverpool in February and discharged a consignment of 24,284 bags of carrots. It was observed, when these bags were being landed, that a large number were in a state of decomposition. A selection was made on the quay under the inspector's supervision, and 1,945 bags, weighing 97,100-lbs., were rejected as unfit for human consumption. The condition of this consignment was again said to be due to severe winter conditions. The rejected carrots were later destroyed at a Corporation tip.

The vessel "Ramore Head" arrived in Liverpool in March and discharged a consignment of 29,718 bags of carrots. Some of the bags showed the contents to be in a state of decomposition. Selection was made under the inspector's supervision and as a result 415 bags, weighing 23,240 lbs., were rejected.

The vessel "Beaverfir" arrived in Liverpool in March and discharged a consignment of 2,900 bags of carrots. Examination on the quay showed that many of the bags contained a high percentage of mouldy and decomposing carrots. After a selection had been made, 292 bags were put under detention. At the request of the consignee, these bags were later released to a firm in Southport where the carrots were sorted, washed and repacked under the supervision of the Southport Public Health Inspector, who later reported that he had rejected the equivalent of 112 bags of carrots for decomposition and had released, as being sound, the equivalent of 180 bags.

Carrots from Eire

The vessel "Derrynane" arrived in Liverpool from Limerick in February and discharged a consignment of 80 bags of carrots. A 100% examination was completed on the 20th February and the whole of the consignment was found to be in a state of decomposition and unfit for human consumption. Eighty bags, weighing 8,960 lbs., were rejected.

A second consignment of 195 bags of carrots was also discharged from the "Derrynane". A 100% examination of this consignment was completed on the 22nd February and 20 bags, weighing 2,240 lbs., were rejected for the same reason. The condition of the above consignments was said to be due to severe winter conditions. The rejected carrots were later destroyed at a Corporation tip.

Vegetables from Cyprus

The vessel "Arne Presthus" arrived in Liverpool in June and discharged a consignment of 47,666 × 28-lb. bags of carrots. It was seen that the contents of a considerable number of the bags were in a state of decomposition and 1,200 of the bags were released to premises in Faversham, Kent, to be sorted, washed and rebagged under the supervision of the local authority, after the consent of the medical officer of health had been obtained. Three hundred bags were removed to a local warehouse where they were dealt with by a City of Liverpool inspector. The balance were selected on the quay under the supervision of an inspector of this Authority and 4,429 bags, weighing 135,012 lbs., were rejected as unfit for human consumption and were later destroyed at Sefton Tip.

The vessel "Santona" discharged a consignment of 389 crates of cauliflowers weighing 2,349 lbs., which were found to be mouldy and decomposing, having been stowed over a cargo of potatoes and covered by a tarpaulin. 100% examination showed that the whole consignment was unfit for human consumption and it was, therefore, rejected.

The vessel "Flaminian" arrived in Liverpool in June and discharged a cargo of 66,430 × 28-lb. bags of potatoes. On inspection after being landed a large number of the bags were found to contain potatoes in a state of decomposition. These bags were sorted under the supervision of an inspector and 2,282 bags, containing 63,896 lbs., of decomposed potatoes were rejected as unfit for human consumption and were later removed to Sefton Tip.

Potatoes from Majorca

The vessel "Pelayo" arrived in Liverpool on 29th June and discharged a consignment, consisting of 14,682 × 56-lb. bags and 8,712 × 56-lb. baskets of potatoes. After leaving Majorca with her cargo this vessel developed engine trouble and had to put back for repairs. This resulted in a considerable delay with consequent deterioration of the perishable part of her cargo and when landed in Liverpool a large number of the sacks and baskets of potatoes were in a state of decomposition. A selection was made on the quay and 11,063 sacks, weighing 276 tons 11 cwt. 2 qr. and 3,156 baskets, weighing 78 tons 18 cwt., were rejected as unfit for human consumption. The potatoes were later removed with the approval of the appropriate medical officer of health, for disposal to a tip within the area of a nearby local authority. 3,619 sacks and 2,382 baskets containing a percentage of decomposing potatoes were permitted to be removed to premises in Manchester for sorting.

Yams and Beans from Nigeria

The vessel "Apapa" arrived in Liverpool on the 2nd April and discharged a consignment of 5,061 bags of yams. On landing it was found that a considerable number of these bags of yams were in a state of decomposition, and a selection was made under the supervision of the inspector concerned. 23% of the yams were found to be affected by decomposition and 1,197 bags of yams, weighing 150,858 lbs., were rejected and later destroyed.

The vessel "Accra" arrived in Liverpool on the 16th April and discharged a consignment of 4,942 bags of yams. A considerable number of these bags of yams were in a state of decomposition and a selection was made under the supervision of the food inspector. This selection was completed on the 26th April when it was revealed that 16% of the bags were affected. 806 bags of yams, weighing 81,242 lbs., were rejected and were later destroyed at a tip.

The same vessel discharged a consignment of 30 bags small white beans (blackeyed beans). When landed it was seen that the bags were heavily infested with insects. On inspection it was found that the beans themselves were riddled with holes which had been made by the insects, and that the live insects were still present in and around the beans. Quantities of debris, insect excreta, etc., were found in the bags. The insects proved to be specimens of the pea and bean weevil together with a type of wasp parasite which lays its eggs in the larvae of the weevil and whose young, when hatched, consume the larvae chosen as their hosts. With the object of preventing the spread of this infestation the consignment was dealt with in co-operation with the local branch of the Infestation Department of the Ministry of Agriculture, Fisheries and Food under the Prevention of Damage by Pests Act, 1949. After being subjected to fumigation on the quay the consignment was disposed of for grinding and compounding in order to convert it into cattle food. Thirty bags, weighing 632 lbs., were rejected.

Carrots and Parsnips from U.S.A.

The vessel "Jon Presthus" arrived in Liverpool in March and discharged a consignment of 3,993 bags of carrots. On landing it was seen that the contents of a certain number of these bags were mouldy and decomposed. After a selection had been made under the inspector's supervision, 743 bags, weighing 37,150 lbs., were rejected and removed to a tip for destruction.

The vessel "Eva Jeanette" arrived in Liverpool in March and discharged a consignment of 9,465 bags of carrots. On landing it was found that a number of bags had disintegrated, and the contents, totalling 2,268 lbs., were found to be in a state of decomposition and were rejected.

The vessel "American Scientist" arrived in Liverpool in March and discharged a consignment of 260 bags of parsnips. This consignment was found to be mouldy and decomposed and 15,770 lbs. of parsnips, after rejection, were later destroyed.

Coconuts from Kenya

The vessel "City of London" arrived in Liverpool on 31st January and discharged a consignment of 135 bags of coconuts, approximately 100 coconuts per bag. Examination of ten bags showed that their contents were from 75% to 100% decomposed, and unfit for human consumption. The consignment was therefore detained for a 100% examination, which was completed on the 5th February, 1963. 10,500 coconuts, weighing 11,760 lbs., the equivalent of 105 bags were rejected and later destroyed.

Dried Apricots from Iran

The vessel "Albistan" arrived in Liverpool late in May and discharged a consignment of 1,035 boxes of dried apricots, each box containing 22½ lbs. Examination on the quay showed that a number of the boxes were stained externally, and that their contents were decomposing, fermenting, infested with beetles, and contaminated with the debris associated with such infestations. After fumigation, each of the consignees was permitted to remove his consignment to the warehouse of his choice where it was placed under detention. Each of them was then informed that every box must be opened for examination. On completion of this 100% examination it was found that 13.5% of the boxes contained fruit which was unfit for human consumption because of the conditions recorded above.

This opinion was confirmed by the City Analyst who examined a sample of the fruit taken from a number of the affected boxes. This sample was also examined under the provisions of the Preservatives in Food Regulations, 1962, and was reported as containing 520 parts per million of sulphur dioxide. A sample of sound fruit taken from the unaffected boxes and submitted to the City Analyst at the same time was reported as containing more than twice as much preservative (1,380 parts per million of sulphur dioxide). These amounts of sulphur dioxide are within the limit permitted by the Regulations (2,000 parts per million). 140 boxes, weighing 1 ton 8 cwt. 14 lbs., were rejected and later removed to Sefton Tip.

Apples from Australia

The vessel "Clan Macdonald" arrived in Liverpool in July and discharged a cargo of 57,107 × 40-lb. boxes of apples. A number of boxes containing rat-eaten and rat-contaminated apples were observed on the quay, and the usual check upon the landing and loading for delivery was made in respect of this cargo. 38 × 40-lb. boxes, weighing 1,520 lbs., were found to be unfit for human consumption and were rejected. The condition of the ship in relation to rodent infestation was investigated and dealt with by members of the port health inspectorate.

Grapes and Apples from Spain

The vessel "Vives" arrived in Liverpool on the 4th October and discharged a cargo of 2,000 barrels of grapes. The contents of a number of these barrels were found to be in a wet, mouldy and decomposed condition. A selection was made under the supervision of the inspector concerned, and 9.1% of the barrels were found to be affected, their contents being unfit for human consumption. 182 barrels, weighing 3,822 lbs., were rejected and later destroyed at Sefton Tip.

The vessel "Valdivia" arrived in Liverpool on the 13th December and discharged a consignment of 492 boxes of apples. An informal sample was taken from this consignment, and was submitted to the City Analyst. The consignment was not detained. His report stated that the apples were seriously contaminated with arsenic and lead as follows: Lead—15 parts per million and Arsenic—2½ parts per million. The permitted limits in respect of these contaminants as set by the Regulations are Lead—3 parts per million and Arsenic—1 part per million. Enquiries were made, and it was found that, with the exception of 42 of the boxes of apples which remained in the consignee's Liverpool warehouse, they had been distributed for retail sale. The 42 boxes were detained and were later released for delivery to premises in Cambridgeshire to be decontaminated by washing under the supervision of the local authority concerned, who had agreed to carry out this work. The Spanish Consulate in Liverpool were informed of this incident and at their request the Spanish Embassy in London were given written confirmation. Letters were sent to other ports in the United Kingdom, to the Ministry of Health and to the Ministry of Agriculture, Fisheries and Food.

The vessel "Almazan" arrived in Liverpool on the 20th December and discharged a consignment of 56 boxes of apples. As this consignment came from the same source as that from the "Valdivia" reported above, it was put under detention and a sample was submitted to the City Analyst who later reported that the apples were seriously contaminated by lead and arsenic as follows: Lead—10 parts per million and Arsenic—2 parts per million. The apples were released for decontamination to be carried out as with the "Valdivia" consignment. The Spanish Embassy were informed and letters were again sent to other ports and to the Ministries.

Hybrids from Uruguay

The vessel "Dryden" arrived in Liverpool on the 18th September and discharged a consignment of 1,566 × 40-lb. cases of hybrid fruit, said to be a cross between a tangerine and an orange. This was the first consignment of this nature to arrive in Liverpool from South America. On landing it was seen to include about 10% of decomposing fruit. After the decomposing fruit had been segregated under the inspector's supervision, 167 × 40-lb. cases, weighing 668 lbs. (approximately 10% of the consignment) were rejected and later disposed of at Sefton Tip.

Madagascar Butter Beans

The vessel "Clan Frazer" arrived in Liverpool on the 27th June, 1963 and discharged a consignment of 1,270 bags of butter beans. On examination, the beans were found to be very badly infested by insects. In addition to the bean weevil, the beans were found, on being opened, to contain numerous very tiny live insects. It was obvious that the "Levelite" insecticide normally used to combat this type of infestation had been added after the beans had become infested and while the external insects had been killed, the internal ones had survived. After fumigation on the quay, the beans were released to warehouse for cleaning. They were inspected after the first cleaning and found to be still unsatisfactory and cleaning was continued until the inspector was satisfied that they were sound and clean. A total of 1,085 lbs. was rejected and diverted for animal feeding only.

Levelited Butter Beans

Throughout the year butter beans which had been treated with levelite, an undesirable insecticide, continued to arrive from Madagascar. A total of 15 ships landed 25,473 bags of butter beans during the year and all these consignments were sent for cleaning, to a local establishment, under the supervision of the inspectors of this department. 508 bags were released for washing at a canning factory outside the jurisdiction of this Authority.

Groundnuts—Confectionery Grade

During the course of the year the usual check has been made upon the discharge of consignments of the above commodity.

All nuts which have been spilled from damaged bags and have become contaminated by contact with the decks of ships, or the floors of the quays, and later collected, have been put under detention, and their disposal has been supervised. 238 bags having a total weight of 23,510 lbs. have been so dealt with, and have later been disposed of to millers for conversion into animal food under guarantee.

Shelled Almonds from Spain

The vessel "Puerto de Burriana" arrived in Liverpool on the 6th February and discharged a consignment of 1,900 bags of shelled almonds. On being inspected at the time of discharge it was observed that some of the bags were contaminated by fuel oil. Some of their contents were fuel oil-damaged and some fuel oil-tainted. A selection was made on the quay and 149 bags were sent into warehouse under detention. Inspection in detail showed that the contents of 18 bags were actually contaminated by fuel oil. These were rejected and later destroyed at Sefton Tip. The balance of 131 bags contained almonds tainted by fuel oil. These were rejected and later released for conversion into animal food, under guarantee. A total of 18 bags, weighing 2,016 lbs., was rejected due to contamination by fuel oil and 131 bags, weighing 13,310 lbs., were fuel oil-tainted and were also rejected.

CANNED GOODS OTHER THAN MEAT

Canned Haricot Whole Green Beans from Hungary

The vessel "Skrzat" arrived in Liverpool from Stettin in February and discharged a cargo of 150 cartons of canned haricot whole green beans. The importation of this consignment was of interest as it provided another instance of one of the difficulties of food inspection at the port arising out of the severe conditions experienced during the winter of 1962/63.

A sample inspection, made shortly after the consignment had been landed, showed that a high percentage of the cans appeared to be "blown" and therefore unfit for human consumption. In view, however, of the previous good record of the particular brand involved, the inspector suspected that some other reason than decomposition and gas formation was responsible for their "blown" appearance. Several cans were opened and the contents of these specimens included a percentage of ice. After the unopened cans had been left to defrost, it was seen that they had returned to their normal appearance. When these cans were opened after defrosting, their contents were found to be in excellent condition, and the consignment, which had then been detained for a few hours, was released forthwith. It was obvious that their "blown" appearance had been due to expansion, on the formation of ice in their fluid content. Enquiry later proved that this consignment had been carried overland, from Hungary to the the exit port, in very severe continental winter conditions, and that the ship and quay temperatures had been insufficient to defrost the contents of the cans before inspection took place.

Canned Pickles from India

The vessel "City of Ottawa" arrived in Liverpool in July and discharged 19 cases, each containing 2 × 20-lb. cans of pickles. On inspection, each of the 38 cans was found to be perforated and leaking and when a few specimens were opened, the cans were found to be lined by a polythene bag, presumably intended to prevent contact between the contents and the interior surface of the can. The tops of the bags had, in fact, been left open and the fluid portion of the contents had attacked the can and produced the perforations. No evidence of decomposition, fermentation, or mould growth was found. Samples were taken from four of the tins, and submitted to the City Analyst after mixing, and 250 parts per million of tin were reported to be present. The Food Standards Committee, in their 1953 report, recommended a limit of 250 parts per million for canned foods. The commodity at the time of importation was therefore not unfit for human consumption although it was likely to become so within a short time. This consignment was released and the Medical Officer of Health for Manchester was notified of the circumstances and it was recommended that the pickles should be re-packed in suitable containers before the tin content rose above the recommended level.

Canned Herrings from Iceland

The vessel "Finkenau" arrived in Liverpool from Hamburg in June and discharged a consignment of canned herrings, produce of Iceland, consisting of 97 cartons each containing 2 × 15-lb. cans and 32 cartons each containing 6 × $5\frac{1}{4}$-lb. cans. This consignment was originally intended for transhipment to Canada, but because of its condition, it was decided not to send it forward. It was therefore subjected to a full examination, and was found to be 100% unsound. All of the cans had blown, many of them to the point of bursting. A total of 386 cans, weighing 4,015 lbs., was rejected.

Canned Plums from Yugoslavia

The vessel "Pavia" arrived in Liverpool in January and discharged a consignment of 462 cartons, each containing 6 × size A8 cans, of plums. On preliminary examination, many of the cans were found to be blown and burst and there was also evidence that the cans had been reconditioned in the canning factory, prior to shipment. Consequently the consignee did not wish to take delivery of the consignment and asked for permission for it to be re-exported. This permission was granted and the consignment was re-exported in March.

Canned Apples from New Zealand

The vessel "Port Macquarrie" arrived in Liverpool in July and discharged a consignment of 500 cartons of canned solid pack apples. Inspection was made on the quay and the consignment was later removed to a warehouse where a 100% examination was undertaken. 106 cartons and four cans were found to be blown and burst and were rejected.

Canned Grapefruit from Israel

The vessel "Karnak" arrived in Liverpool at the beginning of April and discharged a consignment of 500 cartons, each containing 24 × size 2 cans of grapefruit. Preliminary examination on the quay showed that a number of the cans had been perforated by faulty embossing of code marks and a 100% examination had therefore to be made of the four code marks in the consignment. This further examination revealed that in a certain code number the figure 3 had perforated the cans, while in another code number the figure 8 had similarly damaged the cans. The result was that a total of 176 cartons and 17 cans was rejected and destroyed. A second consignment of 720 cartons of the same commodity arrived in the vessel "Akko" early in May and as a result of our experience with the earlier shipment, this consignment was segregated into code numbers on intake into warehouse. Five cartons from each group were examined and in only one group was any defect found, namely the figure 6 in a code number had badly perforated the cans. This code was examined fully and as a result 111 cartons and 15 cans, 56% of the consignment, were found to be perforated and had to be destroyed.

Canned Tomato Puree from Italy

The vessel "Arizona" arrived in Liverpool in March and discharged a consignment of 31,204 cartons, each containing 6 × 5-kilo cans, made up of three code numbers. It is quite usual to find a number of crushed, dented and often burst cans in these cargoes. In this instance, however, the ship had experienced a very rough passage and, in addition to the usual damage, certain cans, grooved at each end about 1½ in. from the rim, had split in the region of the grooves and as a result, 1,860 cans weighing 19,460 lbs., were rejected. A second consignment, made up of 20,398 cartons, of the same commodity, and showing the same fault, arrived in the vessel "Draka" in April, but in this instance the rejection totalled only 450 cans.

Canned Fruit Salad from Spain

The vessel "Pico Blanco" arrived in Liverpool in December 1962 and discharged a consignment of 197 cartons of canned fruit salad, each containing 24 × 15-oz. tins. No evidence of unsoundness was detected when this consignment was landed nor when it was re-examined externally some time later. Early in December, 1963, however, our attention was drawn to the condition of the contents by the consignee who asked for an opinion as to their fitness for human consumption. An examination was made of the contents of a number of tins and it was found that the fruit had an unpleasant taste and smell, and part of it was stained black. Numerous black particles were seen to be adhering to the fruit and to be suspended in the juice, and the interior surfaces of the cans were blackened. Samples were submitted to the City Analyst who reported the presence of hydrogen sulphide, ferrous iron and numerous black particles of ferrous sulphide. The whole consignment was therefore rejected.

Canned Cauliflower from Holland

The vessel "Vechtstroom" arrived in Liverpool in November and discharged a consignment of 20 cartons, each containing 6 × 6¾-lb. cans, and 10 cartons, each containing 24 × 2-lb. cans of cauliflower. A sample of each size of can was submitted to the City Analyst on the 29th November with a request that each be examined under the provisions of the Preservatives in Food Regulations, 1962, and it was reported that the cauliflower in the 6¾-lb. can had been found to contain 100 parts per million of sulphur dioxide and the 2-lb. can contained 90 parts per million of the same preservative. The importation of cauliflower, other than in a dehydrated form, to which a preservative has been added, is contrary to Regulation 3 of the Preservatives in Food Regulations, 1962, unless it is intended for use in the preparation of a food specified by the Regulations as being a food in respect of which the addition of a preservative is permitted, such as pickles. In response to an enquiry, the importer said that this consignment was **not** being imported for use in the preparation of such a specified food, but was intended for sale to the catering trade. Although he pleaded that the sulphur dioxide had been added for the purpose of bleaching the cauliflower in order to present an attractive white product he later asked for permission to export the consignment to a customer in a country where its use would be permitted. On the 10th December a request was made for the consignment to be released for shipment to the Isle of Man where it would be used in the Manx catering trade. Enquiries were made of the Manx Customs Authority and the Isle of Man Local Government Board. The former stated that if it were to be admitted to the Isle of Man there was no Customs procedure which could prevent its return to the mainland at a later date. The Isle of Man Local Government Board reported that its sale in the island would contravene the regulations made by the Board in 1927. Its release was therefore refused, and the whole consignment, weighing 1,290 lbs., was rejected. The consignment was later exported to Holland.

Canned Tomatoes from Italy

The vessel "Phrygia" arrived in Liverpool on the 21st October and discharged a consignment of canned tomatoes. This consignment consisted of 2,000 cartons each containing 12 × 1,200-gram cans; 3,000 cartons each containing 24 × 500-gram cans; and 3,000 cartons each containing 48 × 300-gram cans. The quay inspection showed that a large number of the cartons were stained and that a high percentage of the cans in these cartons were either blown or burst. Samples of each size of can were taken on the 25th October and submitted to the City Analyst to be examined for evidence of metallic contamination. The consignment was moved to a local warehouse, and was there detained to await the analyst's report and the result of a more extensive inspection of the cans which was to be made in the warehouse. The reports showed that lead was present in the various sizes of the cans as follows:

1,200 gram size cans — 0.4 parts per million
500 gram size cans — 4.0 parts per million
300 gram size cans — 0.9 parts per million

The proportion of lead which is permitted, under the provisions of the Lead in Food Regulations, 1961, in canned tomatoes, must not exceed 2.0 parts per million. The sample of the 500 gram cans therefore failed to comply with the requirements of these Regulations. On considering the extent and result of this sampling in relation to the large number of cans in the consignment it was decided to repeat the sampling on a larger scale, and because of the large proportion of blown and burst cans shown to exist on intake into warehouse to submit a number of apparently sound cans to the Public Health Laboratories for testing by incubation. The bacteriological report which was received on the 20th November stated that none of the cans which had been submitted showed any evidence of blowing after 10 days incubation at 37° C. The

City Analyst's reports received on the 12th November indicated that the lead content of the various sizes of the cans was as follows:

1,200 gram size (3 cans—contents bulked)—1.0 parts per million
1,200 gram size (3 cans—contents bulked)—0.0 parts per million
500 gram size (4 cans—contents bulked)—2.7 parts per million
500 gram size (4 cans—contents bulked)—1.4 parts per million
300 gram size (5 cans—contents bulked)—0.7 parts per million
300 gram size (5 cans—contents bulked)—0.7 parts per million
300 gram size (5 cans—contents bulked)—0.8 parts per million
300 gram size (5 cans—contents bulked)—2.2 parts per million

Thus, in the cartons of 500 gram and 300 gram cans, there was a percentage of cans the contents of which were unfit for human consumption as lead was present in excess of 2 parts per million. It was also evident that there was no easy method which could be adopted to distinguish between such cans and those which were either free from lead, or which contained lead only in permitted amounts, other than a chemical analysis of every can.

The problem which presented itself was therefore to decide whether to reject the whole consignment, or whether, after considering all the facts, it would be reasonable to reject only part of it, and to release the remainder.

The factors which had to be taken into account were as follows:—

(1) Enquiry showed that the whole consignment was the produce of one cannery in Italy.

(2) Inspection of the cans showed that no distinguishing codes could be used to separate them into groups representing different units of production.

(3) The City Analyst's reports had not shown any excess of lead in the 1,200 gram tins yet it was this size of tin which had showed the greatest proportion of blowing.

(4) The probable source of the lead contamination was either:

(a) the lead content of the solder used to seal the seam of each can.

(b) lead present as an impurity in the tin plate of which the cans were formed, or

(c) a combination of the above two factors.

(5) The ratio of the content of each size of can to the surface area exposed to the probable sources of contamination set out in No. 4 above, had to be considered in relation to the proportions of lead reported to be present by the City Analyst.

The factors referred to in No. 5 above are set out in a table shown on page 58. Reference to the figures contained in the table demonstrate:—

(1) that in the case of the 1,200 gram cans the ratio between the contents of the cans, and the degree of their contact with the probable sources of contamination was such that the risk of the amount of lead present, in any one can, being in excess of 2 parts per million, was so small as to be negligible. The final column of the table shows that this was confirmed by analysis;

(2) that in the case of the 500 gram and the 300 gram cans the ratios were such that a percentage of the cans would contain lead in proportions greater than the permitted limit of 2 parts per million. The final column of the table shows that this also was confirmed by analysis.

It was therefore decided to release all of the 1,200 gram cans which did not show evidence of blowing or bursting when subjected to 100% examination, and to reject the blown and burst cans, together with all the 500 gram and 300 gram cans.

This decision was communicated to the representative of the firm which had sold the consignment to the importers. He agreed with the reasons for the decision and decided to export the rejected 500 gram and 300 gram cans to Italy, and an undertaking was received from the Italian packer, to whom it was proposed to return these cans, to the effect that if this was permitted they would not be re-exported into the United Kingdom.

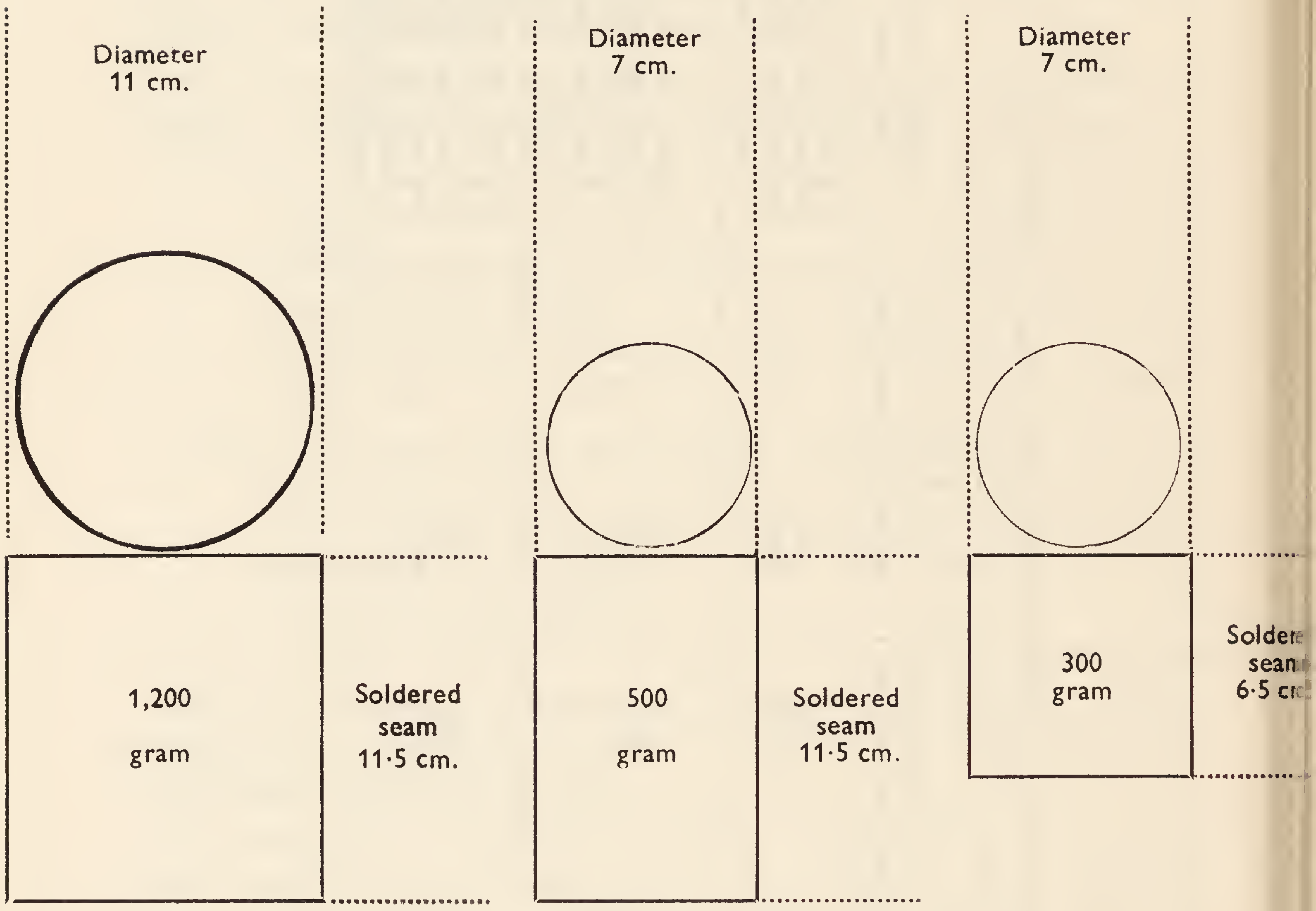
They were accordingly released for this purpose and were later delivered to the quay to be loaded into the vessel "Lycia" for return to Italy.

The 100% examination of the 1,200 gram size cans was completed on the 3rd January, 1964. This examination showed that 2.2% of these cans were either blown or burst, and they were rejected. The total rejections were 3,000 cartons @ 24 × 500 gram cans per carton weighing 63,000 lbs. (lead contamination, for return to Italy), 3,000 cartons @ 48 × 300 gram cans per carton weighing 72,000 lbs. (lead contamination, for return to Italy) and 44 cartons @ 12 × 1,200 gram cans per carton and one can, totalling 1,159 lbs. (blown or burst cans, destroyed).

Table showing the ratios of the contents of the cans in relation to the probable sources of contamination

Content of Cans	Length of soldered seam	Ratio		Surface area of tin plate	Ratio		Analyst's reports Lead content
		Content	Soldered Seam		Content	Surface area	
1,200 grams	11·5 cm.	104 grams	1 cm.	587·6 sq. cm.	2·04 grams	1 sq. cm.	0·4 parts per million 1·0 part per million 0·0 parts per million 3 samples = 8 cans
500 grams	11·5 cm.	43 grams	1 cm.	330 sq. cm.	1·51 grams	1 sq. cm.	4·0 parts per million 2·7 parts per million 1·4 parts per million 1·4 parts per million 4 samples = 14 cans
300 grams	6·5 cm.	46 grams	1 cm.	220 sq. cm.	1·36 grams	1 sq. cm.	0·9 parts per million 0·7 parts per million 0·7 parts per million 0·8 parts per million 2·2 parts per million 5 samples = 22 cans

Diagram showing relationship between the probable sources of contamination and the contents of the various sizes of the cans



Surface area of tin plate
=587·6 sq. cm.

Ratios
1 cm. of seam to 104 grams of contents
1 sq. cm. of tin plate to 2.04 grams of contents

Surface area of tin plate
=330 sq. cm.

Ratios
1 cm. of seam to 43 grams of contents
1 sq. cm. of tin plate to 1·51 grams of contents

Surface area of tin plate
=220 sq. cm.

Ratios
1 cm. of seam to 46 grams of contents
1 sq. cm. of tin plate to 1.36 grams of contents

The circumstances of this incident have been reported above in detail, because of the size and value of the consignment concerned, and to illustrate the means by which it was decided to reject certain cans.

The vessel "Kuciste" arrived in Liverpool in November and discharged a consignment of 550 cartons (72 × 250-gram cans per carton) of canned tomatoes. A sample examination made by the inspector on the quay showed that there was a high percentage of blown and burst cans. The consignment was therefore detained in a local warehouse where a 100%

examination was carried out under the inspector's supervision. 8% of the cans were found, upon completion of this examination, to be unfit for human consumption, and a total of 3,297 cans, weighing 1,339 lbs., was rejected and later destroyed at Sefton Tip.

Canned Shrimps from Norway

The vessel "Tempo" arrived in Liverpool on the 14th February, 1963, and discharged two consignments of canned shrimps, one of 140 cartons and another of 309 cartons. These two consignments were landed in clean condition and were externally sound. After a few cartons had been delivered, however, they were returned as unsaleable. A careful examination was made and numerous cans opened and, in the majority of cases, the shrimps were found to be dark coloured, grey with red rings and of an unappetising appearance. They tasted stale and had an appearance of decay. There were black stains on the lids and sides of the cans. A bacteriological test showed a colony count of approximately 200,000 per gram with no pathogens or salmonellae. Both consignments were rejected and destroyed at Sefton Tip. The total weight rejected was 2,250 lbs., nett.

DAMAGED CARGOES

Bacon from Northern Ireland

The vessel "Buffalo" arrived from Belfast on the 20th March and discharged a consignment of bales of bacon. 109 bales were loaded on to a trailer which was accidentally reversed into the dock. The trailer and two bales were recovered following the incident and by the 5th April, 108 bales had been recovered by a diver. All the bacon was rejected after inspection and was removed to a Liverpool processor for industrial purposes.

Bananas from Canary Islands

A consignment of 9,561 stems of bananas was discharged from the vessel "Monte Anaga" in June. On inspection, a large number of the stems were found to be damaged by fire and smoke. Enquiries revealed that there had been a fire in No. 4 hold tween deck, which had damaged the bananas discharged from that space. A total of 348 stems, weighing 9 tons 1 cwt. 15 lbs., was found to have been affected, and was rejected as unfit for human consumption.

Soya Bean Oil from Canada

The vessel "River Bridge" arrived here from Manchester in February and discharged a cargo of approximately 953 tons of soya bean oil. This tonnage was part of a cargo of 3,600 tons which arrived at Manchester, intended for use in the preparation of food for human consumption. On discharge at Manchester, however, it was found to be contaminated with foul water, and to contain organisms of faecal origin. It was therefore rejected as unfit for the purpose for which it was imported. The 953 tons were purchased by a Liverpool firm who gave an undertaking that this oil would be sold only for purposes other than for human consumption, and it was put under detention. Application for the release of various quantities were received at intervals from a firm in Barking, Essex, and each application was accompanied by an undertaking that the oil, after processing by them would be used in the paint and allied trades. The Health Department at Barking agreed to supervise the disposal of the oil and deliveries commenced in April and were completed in August.

Canned and Dried Fruits from Australia

The vessel "Antrim" arrived here in July and discharged a cargo which included a consignment of 27,393 cartons of canned pears, peaches and apricots and a consignment of 3,524 cases of sultanas and mixed citrus peel. During a rough passage a quantity of aluminium bars fell on to the packages of fruit resulting in many of the cans being crushed and burst and the dried fruit becoming contaminated when its containers were crushed and broken. A total of 4,691 cans, weighing 5,537 lbs., 109 packets of sultanas, weighing 81¾ lbs., and 3 cartons of mixed peel, weighing 90 lbs., was rejected.

Wheat Flour from Canada

The vessel "Elise Schulte" discharged a consignment of 8,000 × 140 lbs. bags of wheat flour in October. On landing it was found that a number of the bags were wet-damaged. These were segregated on the quay, and examination of their contents showed that the wheat flour was caked and mouldy and therefore unfit for human consumption. The bags were put under detention. A total of 142 bags weighing 19,800 lbs. was detained and later released to a local dealer in animal food who guaranteed that it would be used only for conversion into animal food.

COMMINUTED CITRUS BASES FOR THE PREPARATION OF SOFT DRINKS—BULK CONVEYANCE

Until recently these citrus products were always conveyed and imported in containers, usually casks or large tins, which had been filled in the various countries of origin. Now, however, this procedure has been altered and some consignments of citrus bases are arriving here from Spain in bulk, in the ship's tanks. On arrival at Liverpool this material is pumped from these tanks into road tankers and conveyed to the consignee's premises in Lancashire to await processing and bottling.

On the 11th July the following citrus products were discharged from the vessel "Vargas":

(1) 1,652 gallons of natural orange juice
(2) 1,804 gallons of orange base

The consignee's chemist stated, at the time of discharge, that the former consisted of crushed oranges without the outer skins, and that the latter was crushed whole orange including the outer skin. The pumping of this cargo into the road tankers was carried out on the 12th July, and samples were taken at intervals during this operation. These samples were submitted to the City Analyst with a request that they be examined for possible contaminants arising from the conveyance of these commodities in ships' tanks and for the presence of preservatives under the provisions of the Preservatives in Food Regulations, 1962. The City Analyst reported that no contaminants had been detected but that 930 parts per million of sulphur dioxide were present in the "natural orange juice" and the "orange base" contained 250 parts per million of sulphur dioxide and 1,250 parts per million of benzoic acid. As the presence of sulphur dioxide and benzoic acid is permitted by the above Regulations in comminuted citrus bases for the preparation of soft drinks, and as they may be present at **the time of importation** in any proportion, there was no contravention of the Regulations. The necessary declaration of the presence of these preservatives was made in the prescribed form in the documents which accompanied the consignments.

The condition of the road tankers, which were examined before pumping, was found to be satisfactory as regards cleanliness and their state of repair. The interior of the ship's tanks were examined after they had been emptied and there was no reason to complain of their condition. It was ascertained that the internal surfaces had been coated with a special preparation for the conveyance of this type of cargo.

IMPORTATIONS OF FOOD OTHER THAN FOR HUMAN CONSUMPTION

The Meat (Staining and Sterilisation) Regulations, 1960 and the Food and Drugs (Whalemeat) Regulations, 1949/1950

During the year, 472 consignments, consisting of 364,718 packages, were imported subject to the above Regulations for conversion into petfoods. These figures included 350 packages of whale livers from Japan and 19,358 packages of horsemeat from Argentina. The balance consisted of meat and offal received mainly from Australia, New Zealand and Eire. All such consignments were forwarded for sterilisation at approved factories elsewhere.

The Public Health (Imported Food) Regulations, 1937/48 and The Meat (Staining and Sterilisation) Regulations, 1960

The vessel "Defoe" arrived in Liverpool in November and discharged 1,715 boneless quarters of horsemeat, consisting of 765 fore quarters and 950 compensated quarters. These consignments were passed through H.M. Customs entries qualified as "inedible—not for human consumption". Although a form of certificate was to be seen upon the bags, none of them bore the Official Certificate of the country of origin. They were therefore only eligible for importation provided they were dealt with under the Meat (Staining and Sterilisation) Regulations, 1960. A statement was received from each of two firms who had purchased the meat from the consignee, that the meat was intended for distribution only to pet-food shops, but neither of them undertook that it would be sterilised before such distribution, as is required by the above Regulations. The consignments were therefore placed under detention in a local cold store. Twelve samples were taken from the meat and submitted to the Public Health Laboratories for bacteriological examination. The bacteriological reports showed that only two of these samples were free from the food-poisoning organisms of the salmonella group. The other ten were infected as follows:—

3 by S. havana
2 by S. derby
1 by S. havana & S. meleagridis
1 by S. havana & S. bovis morbificans
1 by S. meleagridis
1 by S. minnesota
1 by S. minnesota & S. oranienburg

The owners were informed that this horsemeat would be released only for sterilisation to be carried out at a suitable establishment under the provisions of the Meat (Staining and Sterilisation) Regulations, 1960, and they were asked to make appropriate arrangements for this to be done. All this meat has now been disposed of satisfactorily.

The vessel "Bison" arrived in Liverpool from Belfast in December and discharged a consignment of two containers of meat. One container held 22 hind quarters (the animal was not specified on the ship's manifest) and 12 fore quarters of horsemeat. This container was said to be going to the continent by boat-train service. The second container held 14 carcases of horsemeat and 10 hindquarters of horsemeat. Two indelible stamps appeared on this meat: one large and bearing the words "Northern Ireland Ministry of Agriculture, Export-Passed Saintfield, Co. Down", and the other small and bearing the words "M.A.N.I. Inspection Service, No. — (blurred figure), License No. of sender — 100 (blurred)". The Health Department of the Metropolitan Borough of Islington was notified of the circumstances. They made some enquiries from the consignee, whose address was in that area, and later informed this Authority that all horsemeat from Northern Ireland, consigned to this particular firm, was being exported to the continent. The Chief Veterinary Officer of the Ministry of Agriculture, Government of Northern Ireland, was then asked for particulars of these consignments and he reported that all the horsemeat at present being landed in Liverpool from Northern Ireland was derived from horses slaughtered under his supervision and found to be fit for human consumption. It was all intended for transhipment to Holland and the export stamp of his department would be seen upon the meat and notice would be given, in the future, if any of this commodity, which was unfit for human consumption, was consigned to Liverpool or routed through Liverpool. With regard to the contents of the above two containers it was reported that the horses from which this meat had been derived had been slaughtered under the supervision of an inspector of his department.

THE FOOD HYGIENE (DOCKS, CARRIERS, ETC.) REGULATIONS, 1960

Two contraventions of the above Regulations occurred during the year at berths where vessels discharge foodstuffs of Irish origin. In the first case it was observed that dirty wooden containers, structurally unsuitable, were being used for the transportation of foodstuffs. The firm responsible for these containers was informed of this contravention and was asked to cover the interior surfaces of the containers with a suitable impervious material, to provide a hinged access device at floor level to facilitate cleaning and to allow drainage of the water used for cleaning, and to mark each container clearly and conspicuously with the words "For the transit of food only". These recommendations were carried out. In the second case, the boards, used to prevent bales of bacon coming into contact with the pavement of the quay, were found to be dirty and in a state of disrepair. It was recommended that this situation should be remedied as a matter of urgency and consequently sound, limewashed boards were provided.

EXCHANGE OF INFORMATION

We have continued to circulate information concerning positive findings, following examination of imported food, to other seaports and copies of this information are sent to the Ministry of Health and the Ministry of Agriculture, Fisheries and Food.

Quarterly returns are made to the Ministry of Agriculture, Fisheries and Food giving full details of unsound imports of meat and meat products and also of contraventions of the Official Certificate procedure, both of which are discussed earlier in this report. Copies of any details relating to unsound Australian meat or meat products are sent to the Commonwealth Veterinary Officer, Australia House, London.

The following table shows the total quantities of unsound foodstuffs either destroyed or utilised under supervision during the year 1963:—

	Tons	Cwts.	Qrs.	Lbs.
Beef, Mutton, Pork and Veal	5	3	—	—
Offal (Beef, Mutton, etc.)	3	3	1	1
Canned Goods	124	1	—	—
Fruit and Vegetables	3,220	8	3	—
Cereals	235	6	—	—
General (Lard, Coconut, Butter, etc.) ...	81	12	1	—
Total	3,669	14	1	1

A total of 32 tons 5 cwts. 2 qrs. 20 lbs. of unsound sugar (loose-collected, sweepings, etc.) was dealt with during the year, and suitably disposed of to local refiners for reconditioning, by refining.

The following tables show the variety and numbers of samples submitted to the Public Health Laboratory Service and the City Analyst during the year 1963:—

Samples relating to imported food

Submitted to the Public Health Laboratory Service

Beef, frozen	20
Cake Mix, containing egg	11
Desiccated coconut	2,627
Egg, frozen and dried	89
Egg noodles	32
Frosting mix, containing egg	4
Ground egusi	1
Horseflesh	12
Lemon pie filling, containing egg	2
Ox tongue	2
Oysters	1
Prawns, frozen and dried	249
Shrimps, frozen, dried and canned	36
Tomatoes, canned	18

Submitted to the City Analyst

Apples	30
Apricots, dried	2
Bananas, dried	1
Cake mixes, containing egg	1
Carrots	1
Cauliflower, canned	5
Frosting mixes, containing egg	1
Fruit salad, canned	3
Lard	1
Lemons	12
Lemon pie filling, containing egg	1
Lima beans	1
Oranges	4
Orange juice	6
Ox tongue	2
Pickles, canned	1
Pilchards, canned	1
Plums, canned	1

Prawns, dried	10
Prunes...	1
Tallow, edible	2
Tea	3
Tomatoes, canned	19
Tunafish, canned	3

Samples relating to investigations following food-poisoning and other illness within the Port

Submitted to the Public Health Laboratory Service

Ships' drinking water	225
Food, various	20

In addition to the above, the following samples were submitted for bacteriological examination

Faeces ...	58
Surface swabs (equipment) ...	14

ACKNOWLEDGEMENTS

I desire again to express my appreciation of the valuable assistance received from H.M. Collector of Customs and staff, Ministry of Transport, the Mersey Docks and Harbour Board and their officers, river pilots, and the various shipping companies who have co-operated with the Port Health Authority in the maintenance of Public Health and the prevention of disease in the port. The Consular Bodies have at all times given courteous assistance.

ANDREW B. SEMPLE,
Medical Officer of Health,
Liverpool Port Health Authority.